

=>

Uploading 09399083x.str

L1 STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 11:32:53 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 131 TO ITERATE

100.0% PROCESSED 131 ITERATIONS

4 ANSWERS

SEARCH TIME: 00.00.03

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

 BATCH **COMPLETE**

PROJECTED ITERATIONS: 1934 TO 3306

PROJECTED ANSWERS: 4 TO 200

L2 4 SEA SSS SAM L1

=> d l1

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss ful

FULL SEARCH INITIATED 11:33:50 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2645 TO ITERATE

100.0% PROCESSED 2645 ITERATIONS

61 ANSWERS

SEARCH TIME: 00.00.03

L3 61 SEA SSS FUL L1

=> s l3

L4 3 L3

=> d l4 1-3 bib,ab,hitstr

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
 AN 2001:730744 CAPLUS
 DN 135:288790
 TI Pyrrolopyrimidines as tyrosine kinase inhibitors
 IN Hirst, Gavin C.; Calderwood, David; Munschauer, Rainer; Arnold, Lee D.;
 Johnston, David N.; Rafferty, Paul
 PA Basf Aktiengesellschaft, Germany
 SO PCT Int. Appl., 453 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001072751	A1	20011004	WO 2000-US8593	20000329
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
OS	MARPAT 135:288790				
AB	<p>Chem. compds. having structural formula I and physiol. acceptable salts and metabolites thereof, are inhibitors of serine/threonine and tyrosine kinase activity. Several of the kinases, whose activity is inhibited by these chem. compds., are involved in immunol., hyperproliferative, or angiogenic processes. Thus, these chem. compds. can ameliorate disease states where angiogenesis or endothelial cell hyperproliferation is a factor. These compds. can be used to treat cancer and hyperproliferative disorders, rheumatoid arthritis, disorders of the immune system, transplant rejections and inflammatory disorders. All exemplified compds. significantly inhibited either FGFR, PDGFR, KDR, Tie-2, Lck, Fyn, Blk, Lyn, or Src at .ltoreq.50 .mu.M, and some significantly inhibited cdc2 at .ltoreq.50 .mu.M. In I, ring A is a six membered arom. ring or a five or six membered heteroarom. ring which is optionally substituted. L is -O-, -S-, -S(O)-, -S(O)2-, -N(R)-, -N[C(O)OR]-, -N[C(O)R]-, -N(SO2R)-, -CH2O-, -CH2S-, -CH2N(R)-, -C(NR)-; -CH2N[C(O)R]-, -CH2N[C(O)OR]-, -CH2N(SO2R)-, -CH(NHR)-, -CH[NHC(O)R]-, -CH[NHSO2R]-, -CH[NHC(O)OR]-, -CH[OC(O)R]-, -CH[OC(O)NHR]-, -CH:CH-; -C(:NOR)-, -C(O)-, -CH(OR)-, -C(O)N(R)-, -N(R)C(O)-, -N(R)S(O)-, -N(R)S(O)2-, -OC(O)N(R)-, -N(R)C(O)N(R)-, -NRC(O)O-, -S(O)N(R)-, -S(O)2N(R)-, -N[C(O)R]S(O)-, -N[C(O)R]S(O)2-, -N(R)S(O)N(R)-, -N(R)S(O)2N(R)-, -C(O)N(R)C(O)-, -S(O)N(R)C(O)-, -S(O)2N(R)C(O)-, -OS(O)N(R)-, -OS(O)2N(R)-, -N(R)S(O)O-, -N(R)S(O)2O-, -N(R)S(O)C(O)-, -N(R)S(O)2C(O)-, -SON[C(O)R]-, -SO2N[C(O)R]-, -N(R)SON(R)-, -N(R)SO2N(R)-, -C(O)O-, -N(R)P(OR')O-, -N(R)P(OR')-, -N(R)P(O)(OR')O-, -N(R)P(O)(OR')-, -N[C(O)R]P(OR')O-, -N[C(O)R]P(OR')-, -N[C(O)R]P(O)(OR')O-, -N[C(O)R]P(OR')-, -CH(R)S(O)-, or -CH(R)S(O)2-. L is also -CH(R)N[C(O)OR]-, -CH(R)N[C(O)R]-, -CH(R)N(SO2R)-, -CH(R)O-, -CH(R)S-, -CH(R)N(R)-, -CH(R)N[C(O)R]-, -CH(R)N[C(O)OR]-, -CH(R)N(SO2R)-, -CH(R)C(:NOR)-, -CH(R)C(O)-, -CH(R)CH(OR)-, -CH(R)C(O)N(R)-, -CH(R)N(R)C(O)-, -CH(R)N(R)S(O)-, -CH(R)N(R)S(O)2-, -CH(R)OC(O)N(R)-, -CH(R)N(R)C(O)N(R)-, -CH(R)N(R)C(O)O-, -CH(R)S(O)N(R)-, -CH(R)S(O)2N(R)-, -CH(R)N[C(O)R]S(O)-, -CH(R)N[C(O)R]S(O)2-, -CH(R)N(R)S(O)N(R)-, -CH(R)N(R)S(O)2N(R)-, -CH(R)C(O)N(R)C(O)-, -CH(R)S(O)N(R)C(O)-, -CH(R)S(O)2N(R)C(O)-, -CH(R)OS(O)N(R)-, -CH(R)OS(O)2N(R)-,</p>				

-CH(R)N(R)S(O)O-, -CH(R)N(R)S(O)2O-, -CH(R)N(R)S(O)C(O)-, -CH(R)N(R)S(O)2C(O)-, -CH(R)SON[C(O)R]-, -CH(R)S(O)2N[C(O)R]-, -CH(R)N(R)SON(R)-, -CH(R)N(R)S(O)2N(R)-; -CH(R)C(O)O-, -CH(R)N(R)P(OR')O-, -CH(R)N(R)P(OR')-, -CH(R)N(R)P(O)(OR')O-, -CH(R)N(R)P(O)(OR')-, -CH(R)N[C(O)R]P(OR')O-, -CH(R)N[C(O)R]P(OR')-, -CH(R)N[C(O)R]P(O)(OR')O- or -CH(R)N[C(O)R]P(OR')-. In L, each R and R' is, independently, -H, acyl, substituted or unsubstituted aliph., arom., arylalkyl, heteroarom., cycloalkyl or arylalkyl; or L is -RbN(R)S(O)2-, -RbN(R)P(O)-, or -RbN(R)P(O)O-, wherein Rb is an alkylene group which when taken together with the sulfonamide, phosphinamide, or phosphonamide group to which it is bound forms a five or six membered ring fused to ring A; or L is II (X = O or nil; Y = O or nil) or III (Y = O, nil) wherein R85 taken together with the phosphinamide, or phosphonamide is a 5-, 6-, or 7-membered, arom., heteroarom. or heterocycloalkyl ring system. G is a direct bond, -(CH2)j- (j = 1-6), C2-C6-alkenylene, C3-C8-cycloalkylene or C1-C6-oxaalkylene group. R1 is substituted or optionally substituted aliph., cycloalkyl, bicycloalkyl, cycloalkenyl, arom., heteroarom., heteroaralkyl, heterocycloalkyl, heterobicycloalkyl, alkylamido, arylamido, -S(O)2-alkyl, -S(O)2-cycloalkyl, -C(O)alkyl, or -B-E, wherein B is substituted or unsubstituted cycloalkyl, heterocycloalkyl, arom., heteroarom., alkylene, aminoalkyl, alkylencarbonyl, or aminoalkylcarbonyl and E is substituted or unsubstituted azacycloalkyl, azacycloalkylcarbonyl, azacycloalkylsulfonyl, azacycloalkylalkyl, heteroaryl, heteroarylcarbonyl, heteroarylsulfonyl, heteroaralkyl, alkyl sulfonamido, aryl sulfonamido, bicycloalkyl, ureido, thioureido or aryl. R2 is -H or substituted or unsubstituted aliph., cycloalkyl, halogen, -OH, cyano, arom., heteroarom., heterocycloalkyl, aralkyl, heteroaralkyl, -(CH2)0-3NR4R5, or -(CH2)0-3C(O)NR4R5. R3 is substituted or unsubstituted aliph., alkenyl, cycloalkyl, arom., heteroarom., or heterocycloalkyl with provisos. R4, R5 and the N atom together form a 3, 4, 5, 6 or 7-membered, substituted or unsubstituted heterocycloalkyl, heterobicycloalkyl or heteroarom.; or R4 and R5 are each, independently, -H, azabicycloalkyl, heterocycloalkyl, substituted or unsubstituted alkyl or Y-Z; Y is -C(O)-, -(CH2)p-, -S(O)2-, -C(O)O-, -SO2NH-, -CONH-, -(CH2)pO-, -(CH2)pNH-, -(CH2)pS-, -(CH2)pS(O)-, and -(CH2)pS(O)2-; p = 0-6; and Z is -H, or substituted or unsubstituted alkyl, amino, aryl, heteroaryl or heterocycloalkyl. 546 Example prepn. are included. For example, addn. of piperidine to 4-[4-amino-5-(4-phenoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]cyclohexanone in DCE and AcOH, followed by treatment with Na[(AcO)3BH], workup and chromatog., gave cis- and trans-IV.

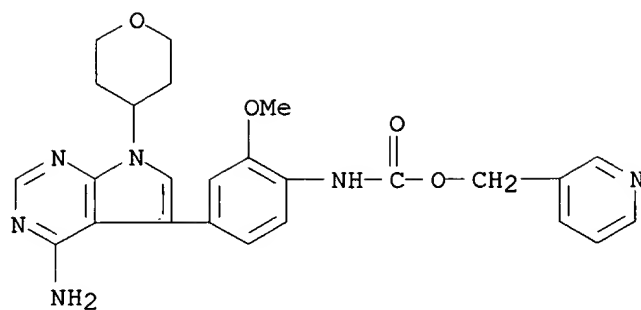
IT 262444-13-3P 262444-14-4P 262444-16-6P

262444-17-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(intermediate; prepn. of pyrrolopyrimidinamines as protein kinase inhibitors)

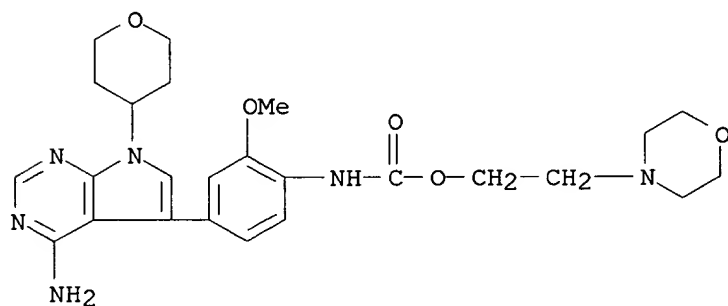
RN 262444-13-3 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 3-pyridinylmethyl ester (9CI) (CA INDEX NAME)



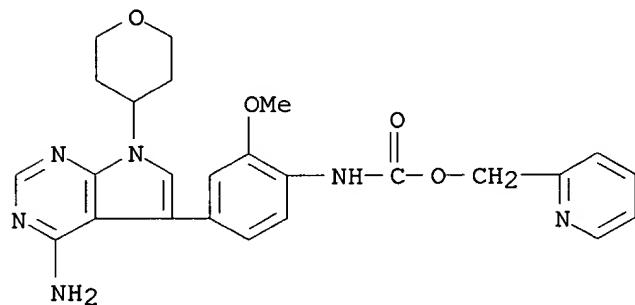
RN 262444-14-4 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



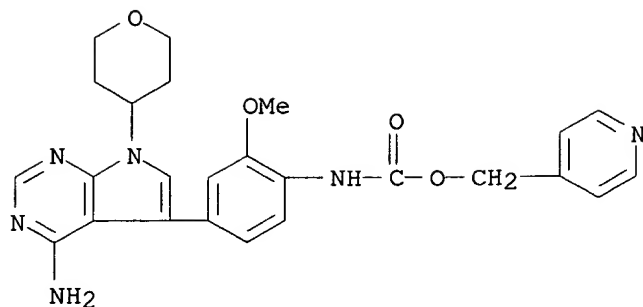
RN 262444-16-6 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 2-pyridinylmethyl ester (9CI) (CA INDEX NAME)



RN 262444-17-7 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 4-pyridinylmethyl ester (9CI) (CA INDEX NAME)

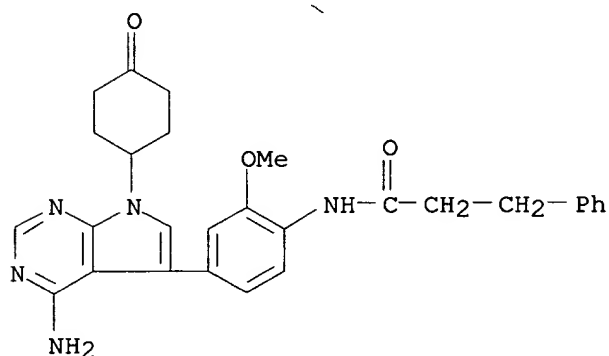


IT **262444-51-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of pyrrolopyrimidinamines as protein kinase inhibitors)

RN 262444-51-9 CAPLUS

CN Benzenepropanamide, N-[4-[4-amino-7-(4-oxocyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]- (9CI) (CA INDEX NAME)



IT **364354-19-8P 364354-56-3P 364354-57-4P**

364354-68-7P 364356-13-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyrrolopyrimidinamines as protein kinase inhibitors)

RN 364354-19-8 CAPLUS

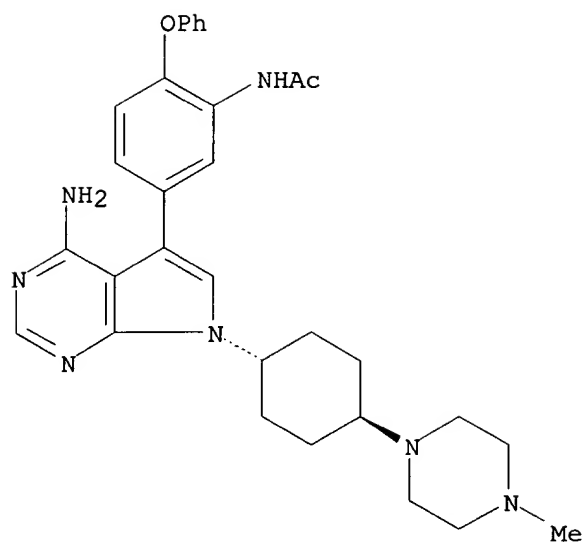
CN Acetamide, N-[5-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-phenoxyphenyl]-, monoacetate (9CI) (CA INDEX NAME)

CM 1

CRN 364354-18-7

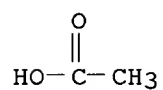
CMF C31 H37 N7 O2

Relative stereochemistry.



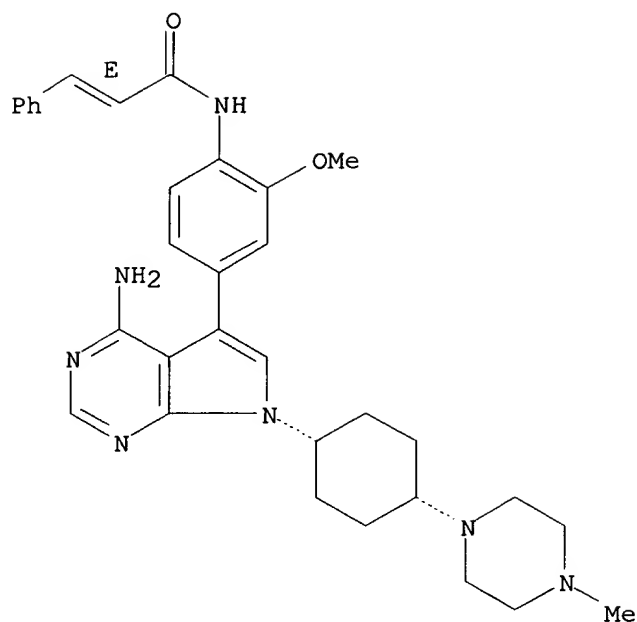
CM 2

CRN 64-19-7
CMF C2 H4 O2



RN 364354-56-3 CAPLUS
CN 2-Propenamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-3-phenyl-, (2E)- (9CI)
(CA INDEX NAME)

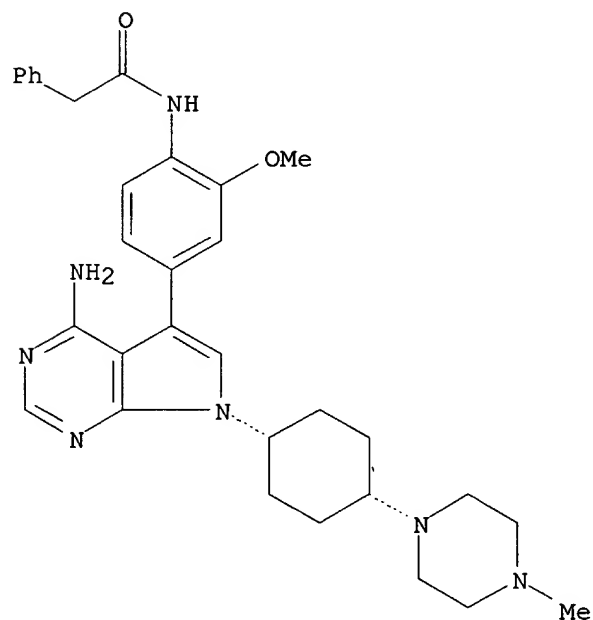
Relative stereochemistry.
Double bond geometry as shown.



RN 364354-57-4 CAPLUS

CN Benzeneacetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-(9CI) (CA INDEX NAME)

Relative stereochemistry.

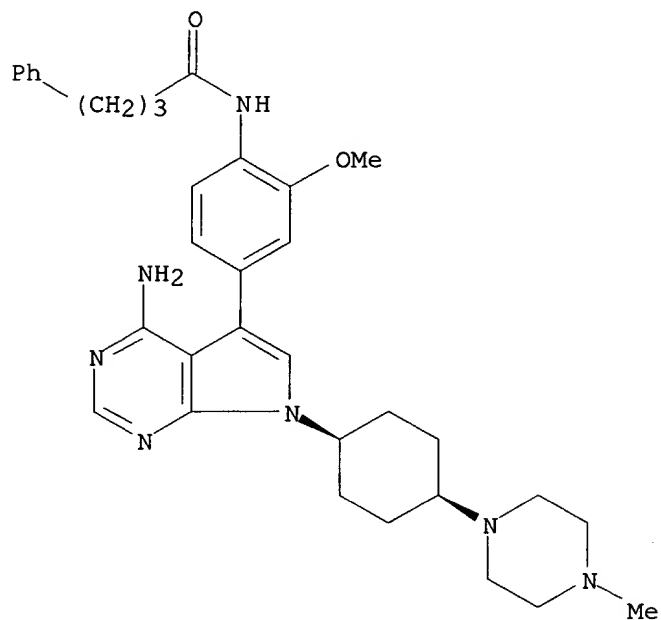


RN 364354-68-7 CAPLUS

CN Benzenebutanamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-

piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-
(9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 364356-13-8 CAPLUS

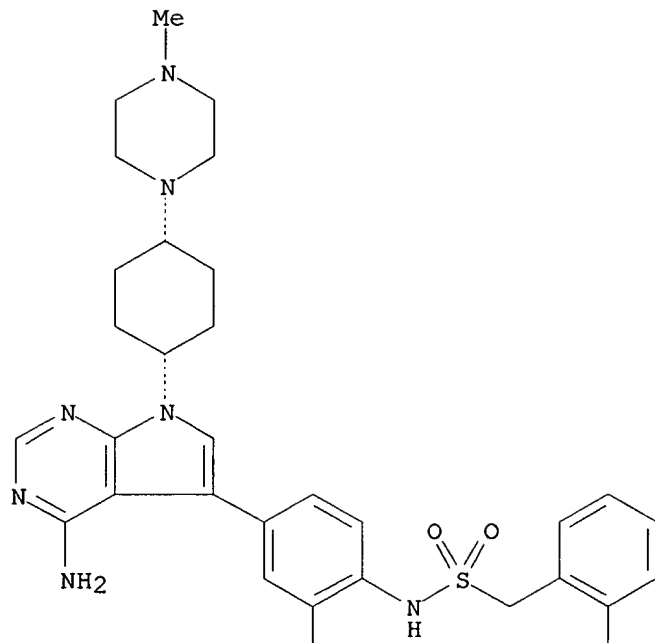
CN Benzenemethanesulfonamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-fluorophenyl]-2-nitro-, (2Z)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 262443-68-5

CMF C30 H35 F N8 O4 S

Relative stereochemistry.



F

NO₂

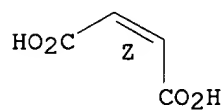
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



IT 262442-79-5

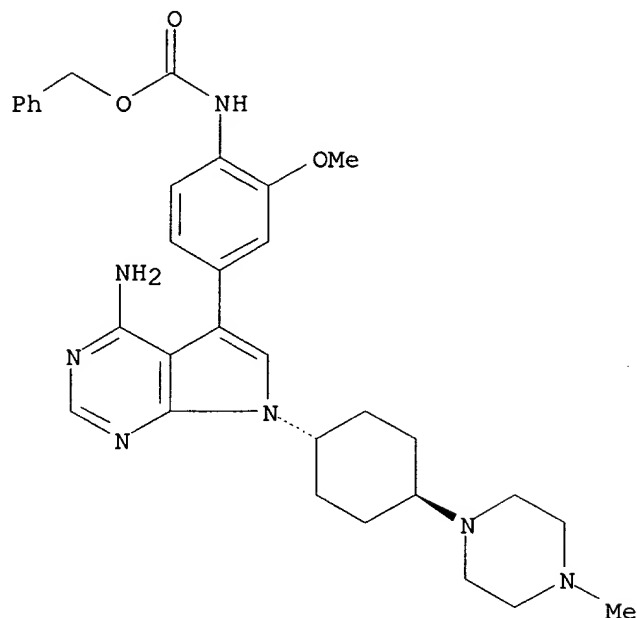
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; prepn. of pyrrolopyrimidinamines as protein kinase inhibitors)

RN 262442-79-5 CAPLUS

CN Carbamic acid, [4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.

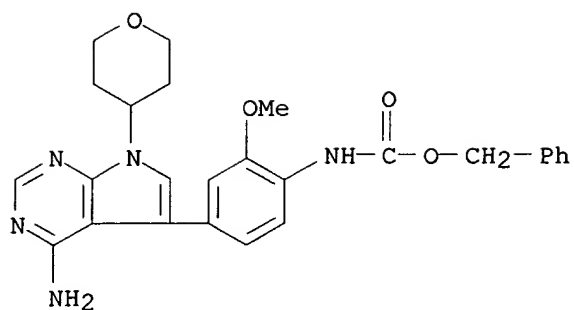


IT 262439-86-1P 262439-87-2P 262439-90-7P
 262439-91-8P 262439-92-9P 262439-96-3P
 262439-97-4P 262439-98-5P 262439-99-6P
 262440-00-6P 262440-04-0P 262440-06-2P
 262442-22-8P 262442-32-0P 262442-33-1P
 262442-39-7P 262442-47-7P 262442-80-8P
 262443-69-6P 262443-91-4P 262444-01-9P
 262444-02-0P 262444-03-1P 262444-68-8P
 262445-41-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (target compd.; prepn. of pyrrolopyrimidinamines as protein kinase inhibitors)

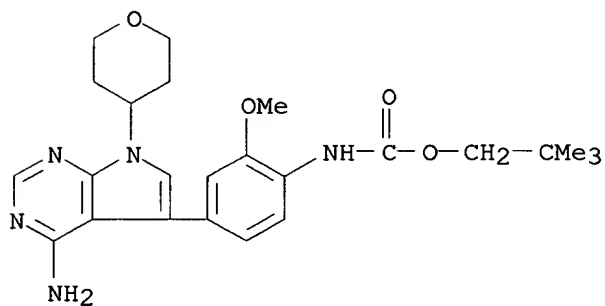
RN 262439-86-1 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



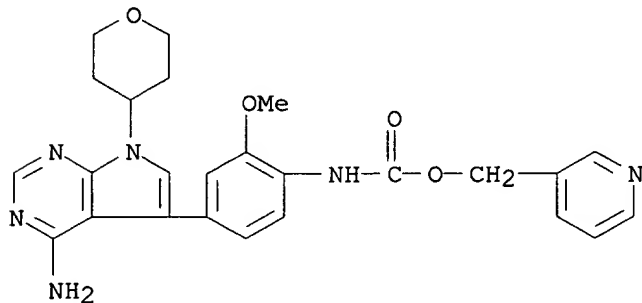
RN 262439-87-2 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 2,2-dimethylpropyl ester (9CI) (CA INDEX NAME)



RN 262439-90-7 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 3-pyridinylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

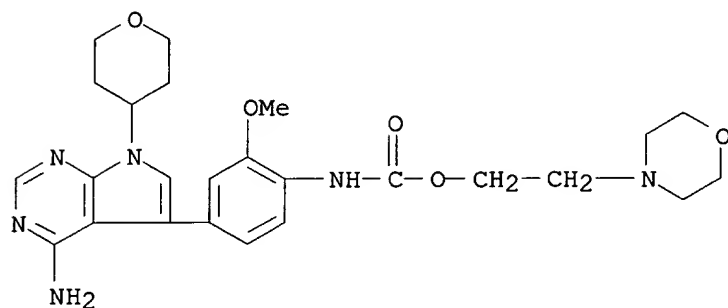


● HCl

RN 262439-91-8 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-

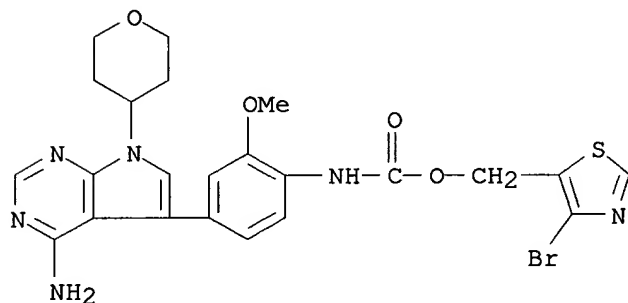
d[pyrimidin-5-yl]-2-methoxyphenyl]-, 2-(4-morpholinyl)ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

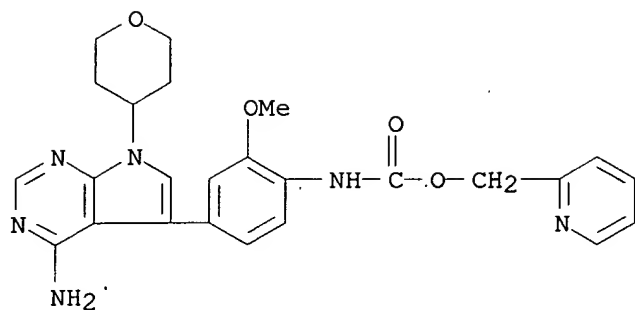
RN 262439-92-9 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, (4-bromo-5-thiazolyl)methyl ester (9CI) (CA INDEX NAME)



RN 262439-96-3 CAPLUS

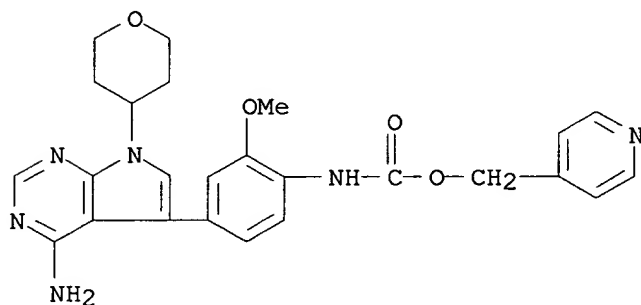
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 2-pyridinylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 262439-97-4 CAPLUS

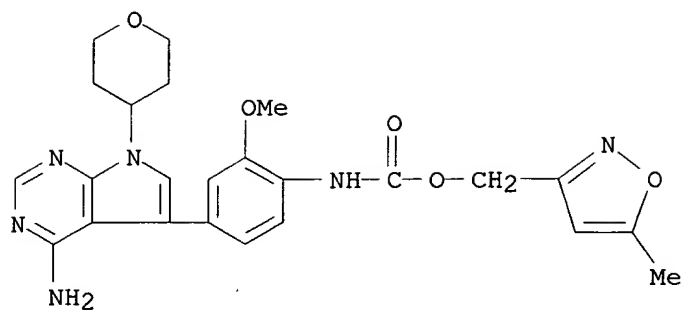
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 4-pyridinylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 262439-98-5 CAPLUS

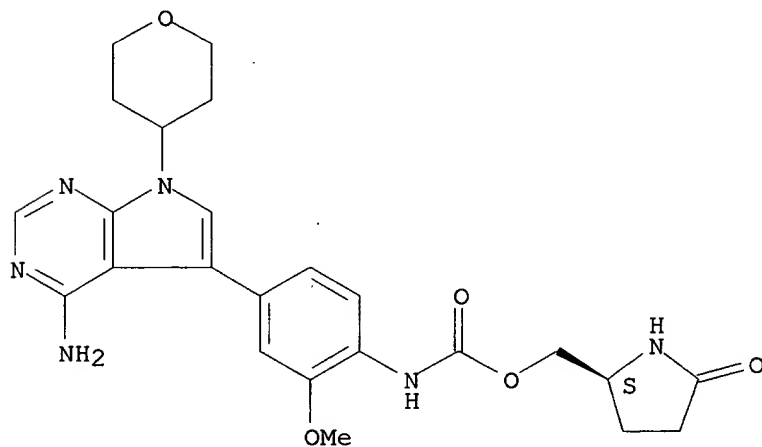
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, (5-methyl-3-isoxazolyl)methyl ester (9CI) (CA INDEX NAME)



RN 262439-99-6 CAPLUS

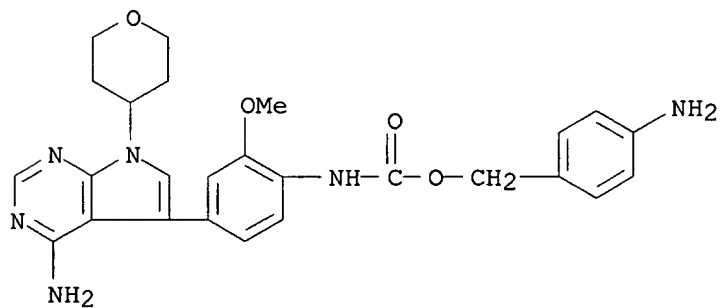
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, [(2S)-5-oxo-2-pyrrolidinyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

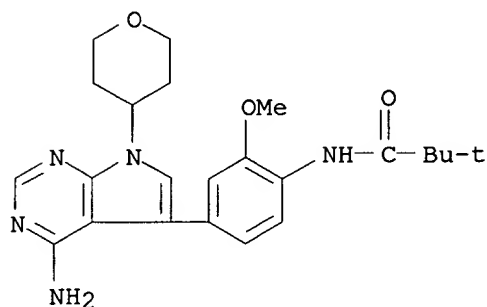


RN 262440-00-6 CAPLUS

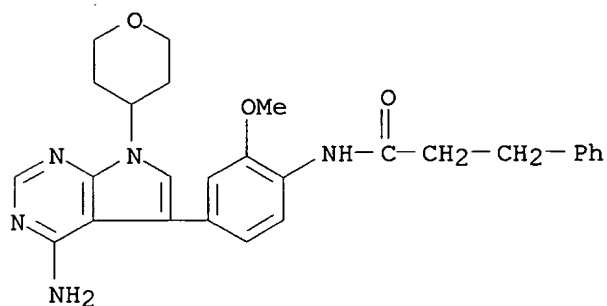
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, (4-aminophenyl)methyl ester (9CI) (CA INDEX NAME)



RN 262440-04-0 CAPLUS
 CN Propanamide, N-[4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

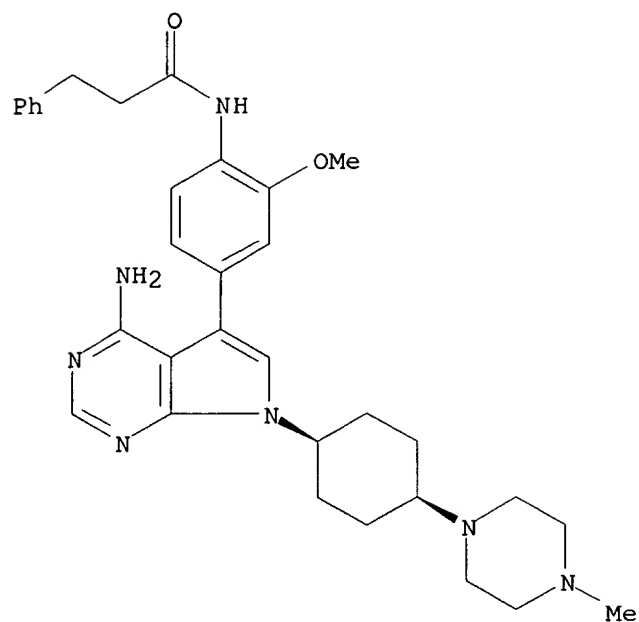


RN 262440-06-2 CAPLUS
 CN Benzenepropanamide, N-[4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]- (9CI) (CA INDEX NAME)



RN 262442-22-8 CAPLUS
 CN Benzenepropanamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]- (9CI) (CA INDEX NAME)

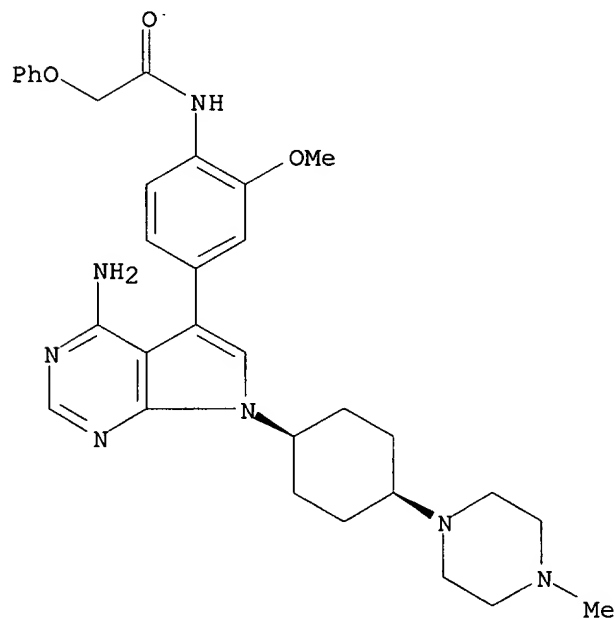
Relative stereochemistry.



RN 262442-32-0 CAPLUS

CN Acetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-phenoxy- (9CI) (CA INDEX NAME)

Relative stereochemistry.



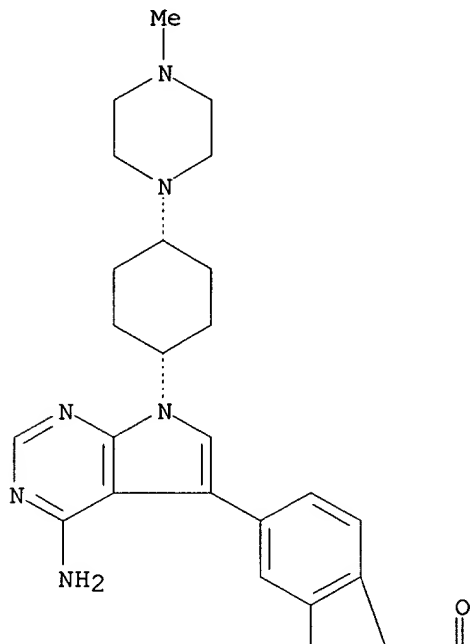
RN 262442-33-1 CAPLUS

CN Acetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-

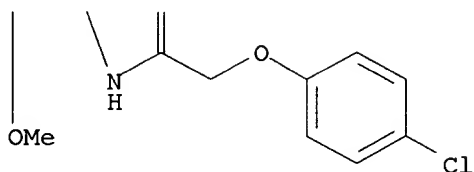
pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-(4-chlorophenoxy)- (9CI)
(CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A

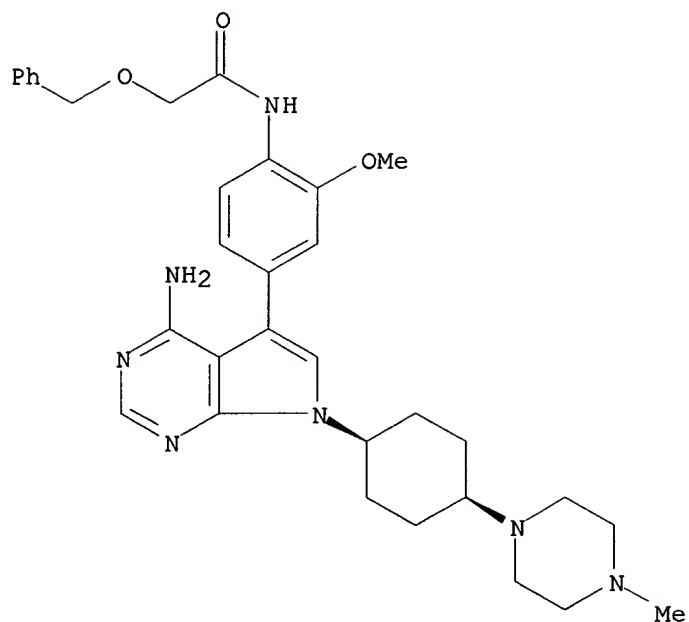


PAGE 2-A



RN 262442-39-7 CAPLUS
CN Acetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-(phenylmethoxy)- (9CI)
(CA INDEX NAME)

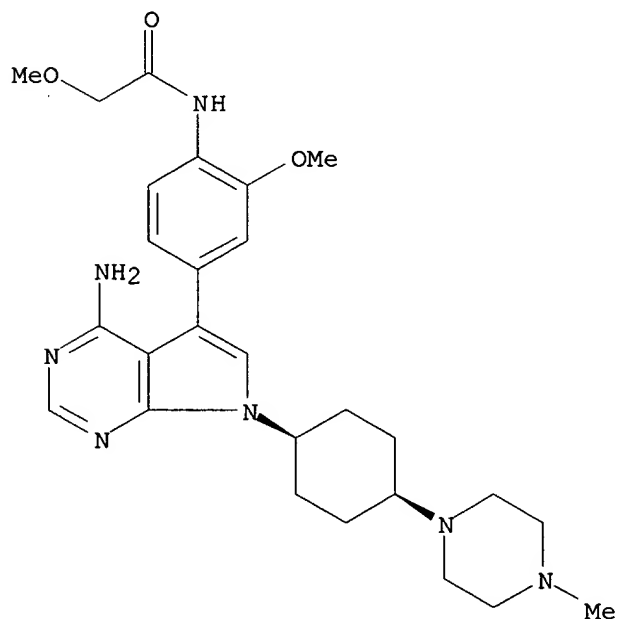
Relative stereochemistry.



RN 262442-47-7 CAPLUS

CN Acetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-methoxy- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 262442-80-8 CAPLUS

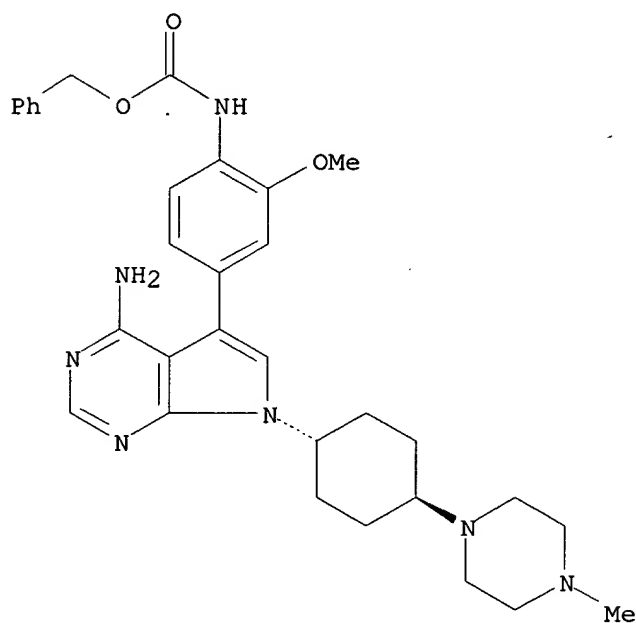
CN Carbamic acid, [4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-methoxy- (9CI) (CA INDEX NAME)

7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, phenylmethyl ester,
(2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262442-79-5
CMF C32 H39 N7 O3

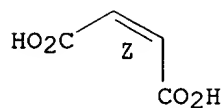
Relative stereochemistry.



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



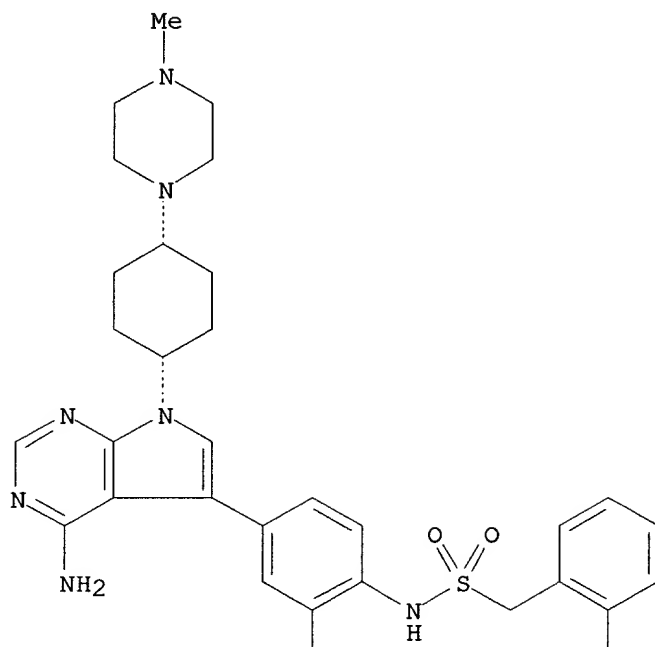
RN 262443-69-6 CAPLUS
CN Benzenemethanesulfonamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-fluorophenyl]-2-nitro-, (2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262443-68-5
CMF C30 H35 F N8 O4 S

Relative stereochemistry.

PAGE 1-A



PAGE 2-A

F

NO₂

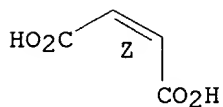
CM 2

CRN 110-16-7

CMF C4 H4 O4

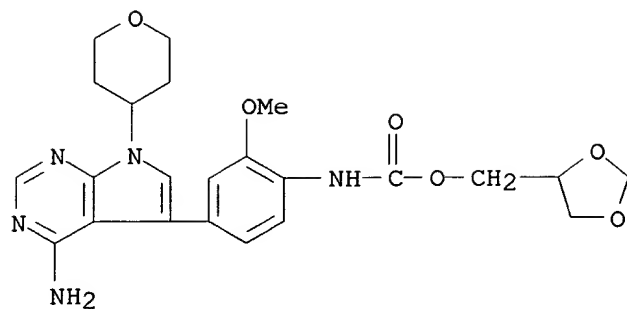
CDES 2:Z

Double bond geometry as shown.



RN 262443-91-4 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 1,3-dioxolan-4-ylmethyl ester (9CI)
(CA INDEX NAME)



RN 262444-01-9 CAPLUS

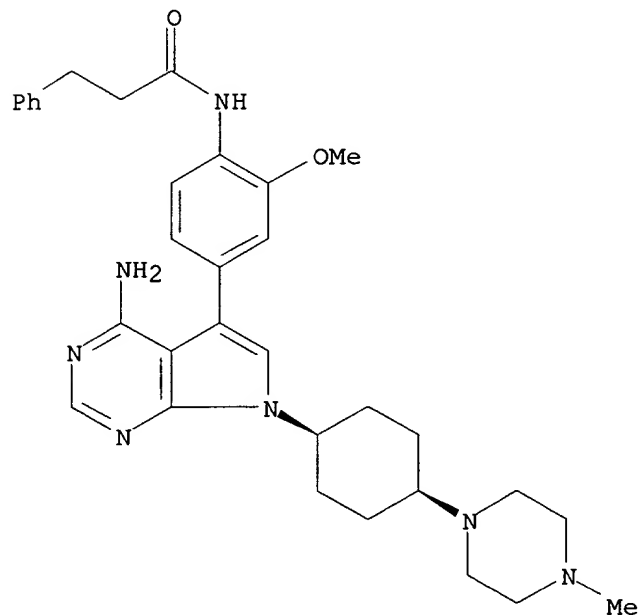
CN Benzenepropanamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, (2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262442-22-8

CMF C33 H41 N7 O2

Relative stereochemistry.



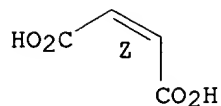
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

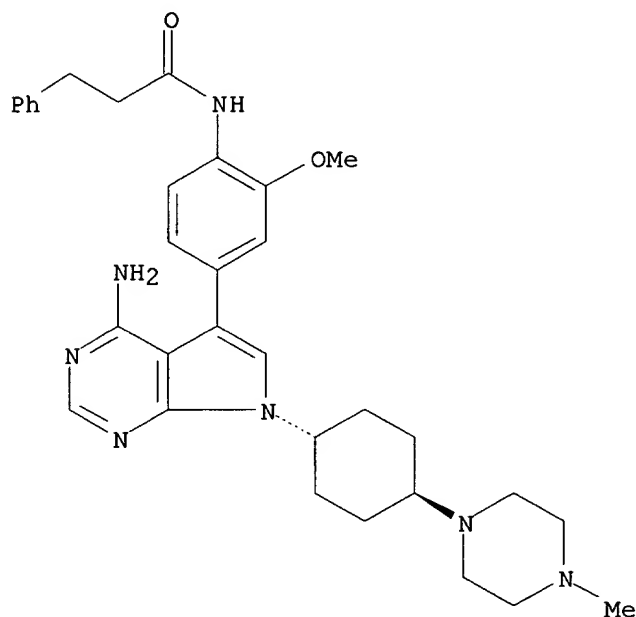
Double bond geometry as shown.



RN 262444-02-0 CAPLUS

CN Benzenepropanamide, N-[4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-(9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 262444-03-1 CAPLUS

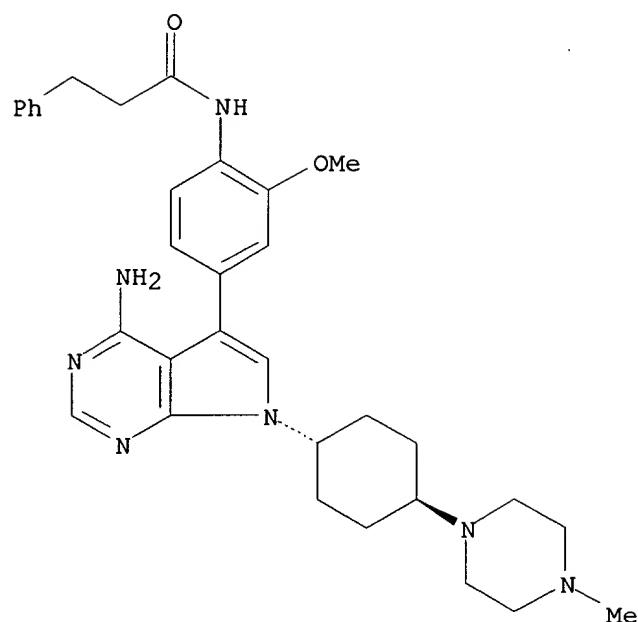
CN Benzenepropanamide, N-[4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-(2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262444-02-0

CMF C33 H41 N7 O2

Relative stereochemistry.



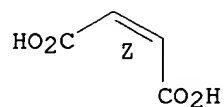
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



RN 262444-68-8 CAPLUS

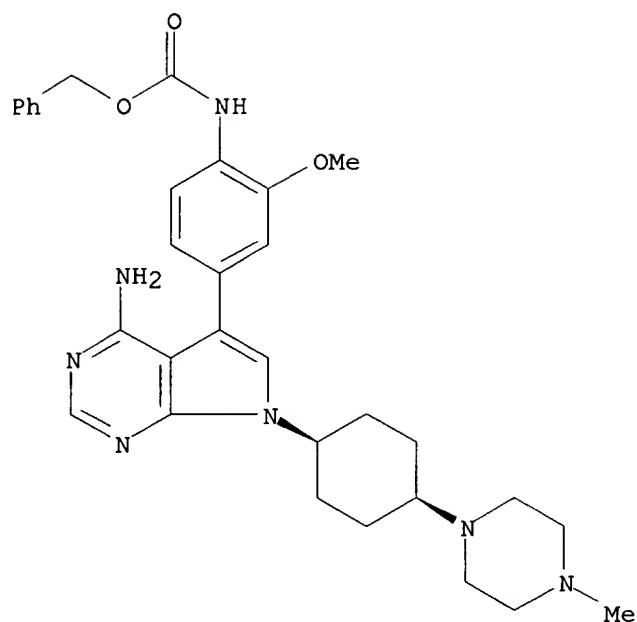
CN Carbamic acid, [4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, phenylmethyl ester, (2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262444-67-7

CMF C32 H39 N7 O3

Relative stereochemistry.



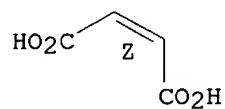
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



RN 262445-41-0 CAPLUS

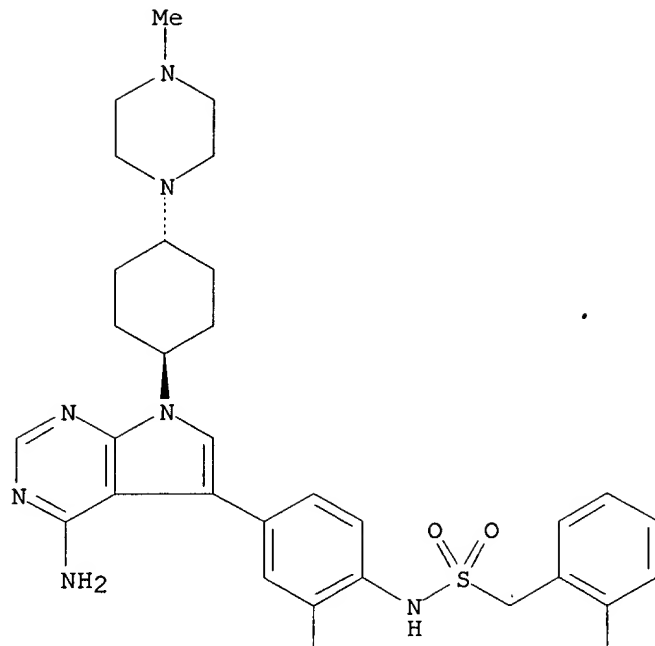
CN Benzenesulfonamide, N-[4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-fluorophenyl]-2-nitro-, (2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262445-40-9

CMF C30 H35 F N8 O4 S

Relative stereochemistry.



F

NO₂

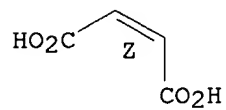
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
 AN 2000:210172 CAPLUS
 DN 132:251160
 TI Preparation of pyrrolopyrimidines as protein kinase inhibitors
 IN Hirst, Gavin C.; Calderwood, David; Wishart, Neil; Ritter, Kurt; Arnold, Lee D.
 PA Basf A.-G., Germany
 SO PCT Int. Appl., 304 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000017203	A1	20000330	WO 1999-US21560	19990917
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 9960484	A1	20000410	AU 1999-60484	19990917
	EP 1114053	A1	20010711	EP 1999-969415	19990917
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
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	NO 2001001356	A	20010516	NO 2001-1356	20010316
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	US 1998-100833P	P	19980918		
	US 1998-100834P	P	19980918		
	US 1998-100946P	P	19980918		
	WO 1999-US21560	W	19990917		
OS	MARPAT 132:251160				
AB	<p>7H-Pyrrolo[2,3-d]pyrimidin-4-amines (I) [wherein A = (un)substituted 6-membered arom. ring or 5- or 6-membered heteroarom. ring; L = RbN(R)S(O)₂, RbN(R)P(O), or RbN(R)P(O)O, where Rb = alkylene group which when taken together with the sulfonamide, phosphinamide or phosphonamide group to which it is bound forms a 5- or 6-membered ring fused to ring A, or L = 5-, 6-, or 7-membered (oxa)azaphosphaarom. or (oxa)azaphosphacycloalkyl ring; R = H, acyl, or (un)substituted aliph., (hetero)arom., or cycloalkyl; R1 = (un)substituted (hetero)cyclic, (hetero)arom., amido, acyl, or (cyclo)alkylsulfonyl; R2 = H, halo, OH, CN, (un)substituted aliph., cycloalkyl, (hetero)arom., (hetero)aralkyl, amino, or amido; R3 (un)substituted aliph., alkenyl, (hetero)cycloalkyl, or (hetero)arom.; n = 0-6], and physiol. acceptable salts and metabolites thereof, were prepd. For example, addn. of piperidine to 4-[4-amino-5-(4-phenoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]cyclohexanone in DCE and AcOH, followed by workup and chromatog., gave cis- and trans-II. I inhibit serine/threonine and tyrosine kinase activity, which are involved in immunol., hyperproliferative, and angiogenic processes. All exemplified compds. significantly inhibited either FGFR, PDGFR, KDR, Tie-2, Lck, Fyn, Blk, Lyn, or Src at concns. of .1 to req. 50 .mu.M, and some significantly inhibited cdc2 at concns. of 50 .1 to req. .mu.M. Thus, these compds. are useful in the treatment of cancer and hyperproliferative disorders, rheumatoid arthritis, disorders of the</p>				

immune system, transplant rejections, and inflammatory disorders.

IT 262444-13-3P 262444-14-4P 262444-16-6P

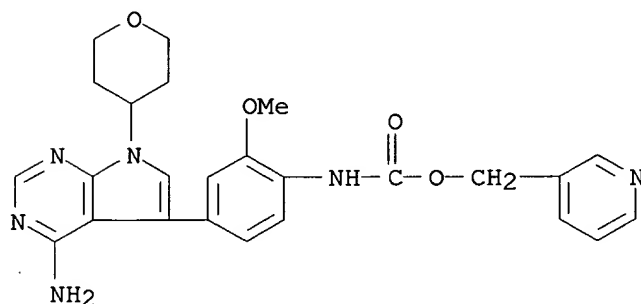
262444-17-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(intermediate; prepn. of 7H-pyrrolo[2,3-d]pyrimidin-4-amines as protein kinase inhibitors)

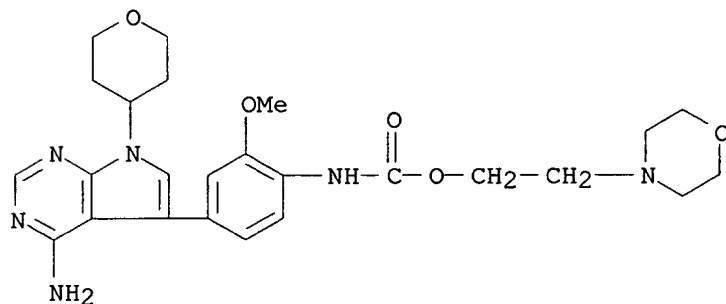
RN 262444-13-3 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 3-pyridinylmethyl ester (9CI) (CA INDEX NAME)



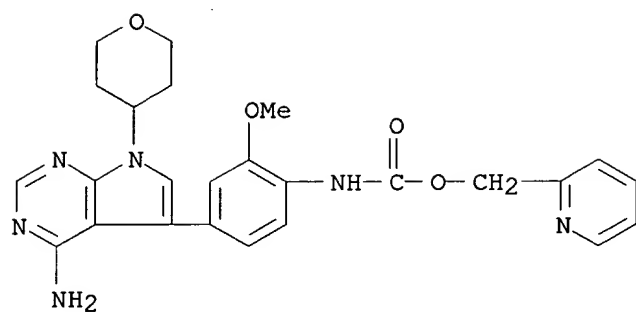
RN 262444-14-4 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



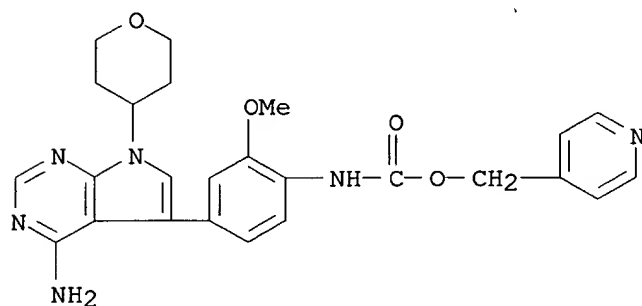
RN 262444-16-6 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 2-pyridinylmethyl ester (9CI) (CA INDEX NAME)



RN 262444-17-7 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 4-pyridinylmethyl ester (9CI) (CA INDEX NAME)

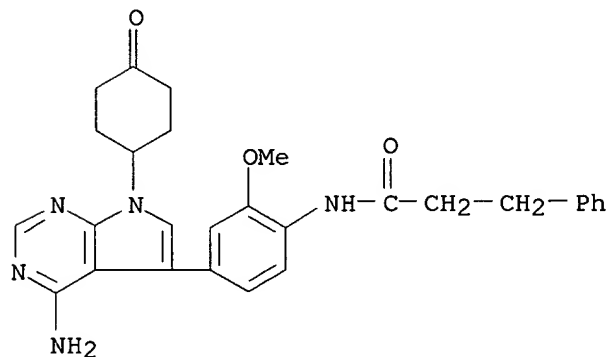


IT 262444-51-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of 7H-pyrrolo[2,3-d]pyrimidin-4-amines as protein kinase inhibitors)

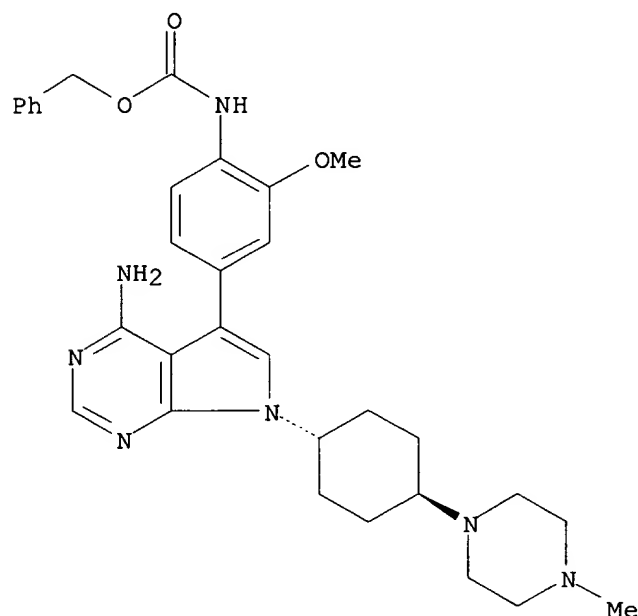
RN 262444-51-9 CAPLUS

CN Benzenepropanamide, N-[4-[4-amino-7-(4-oxocyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]- (9CI) (CA INDEX NAME)

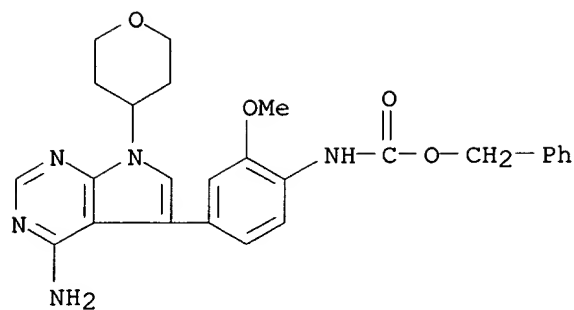


IT **262442-79-5**
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactant; prepn. of 7H-pyrrolo[2,3-d]pyrimidin-4-amines as protein
 kinase inhibitors)
 RN 262442-79-5 CAPLUS
 CN Carbamic acid, [4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-
 7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, phenylmethyl ester
 (9CI) (CA INDEX NAME)

Relative stereochemistry.

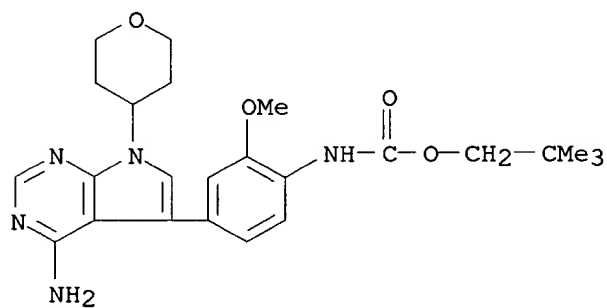


IT **262439-86-1P 262439-87-2P 262439-90-7P**
262439-91-8P 262439-92-9P 262439-96-3P
262439-97-4P 262439-98-5P 262439-99-6P
262440-00-6P 262440-04-0P 262440-06-2P
262442-22-8P 262442-32-0P 262442-33-1P
262442-39-7P 262442-47-7P 262442-80-8P
262443-69-6P 262443-91-4P 262444-01-9P
262444-02-0P 262444-03-1P 262444-68-8P
262445-41-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (target compd.; prepn. of 7H-pyrrolo[2,3-d]pyrimidin-4-amines as
 protein kinase inhibitors)
 RN 262439-86-1 CAPLUS
 CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-
 d]pyrimidin-5-yl]-2-methoxyphenyl]-, phenylmethyl ester (9CI) (CA INDEX
 NAME)



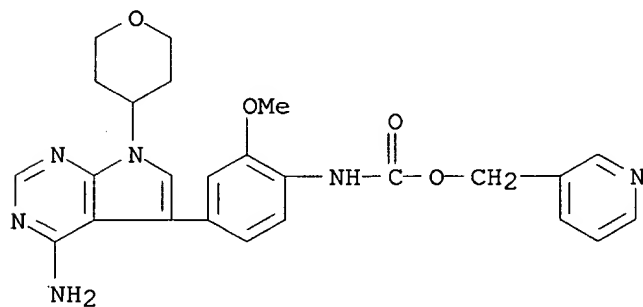
RN 262439-87-2 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 2,2-dimethylpropyl ester (9CI) (CA INDEX NAME)



RN 262439-90-7 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 3-pyridinylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

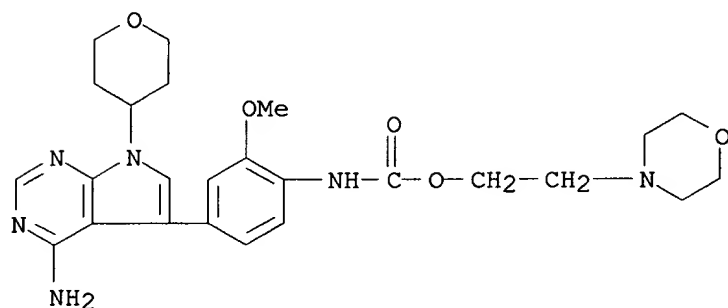


● HCl

RN 262439-91-8 CAPLUS

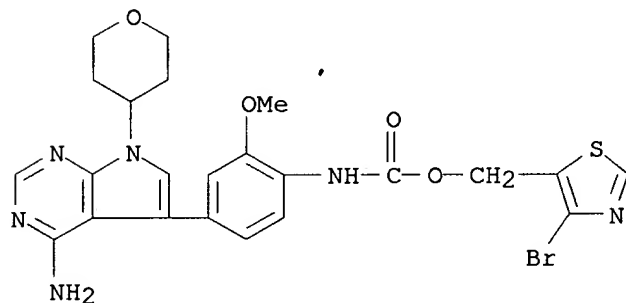
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-

d[pyrimidin-5-yl]-2-methoxyphenyl]-, 2-(4-morpholinyl)ethyl ester,
monohydrochloride (9CI) (CA INDEX NAME)

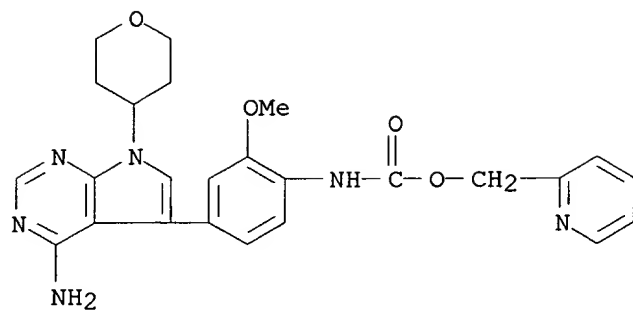


● HCl

RN 262439-92-9 CAPLUS
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, (4-bromo-5-thiazolyl)methyl ester (9CI) (CA INDEX NAME)



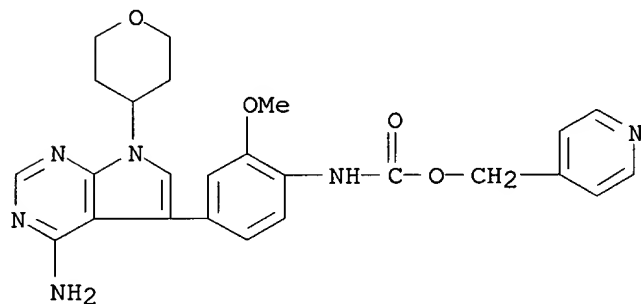
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CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 2-pyridinylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 262439-97-4 CAPLUS

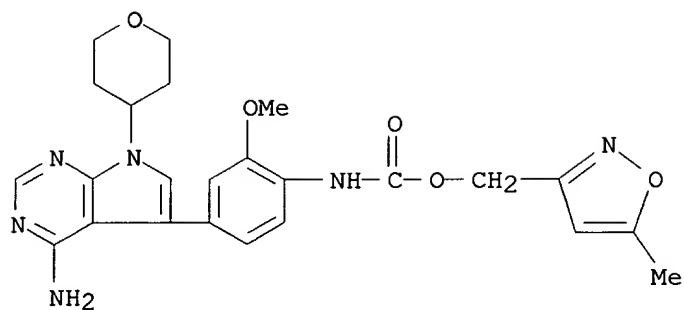
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 4-pyridinylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 262439-98-5 CAPLUS

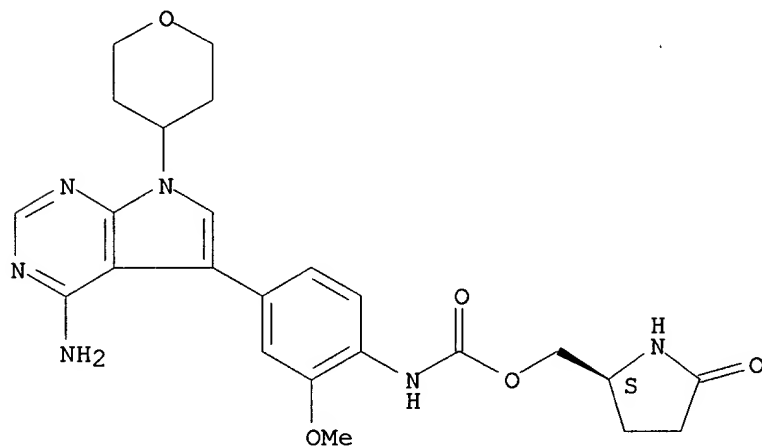
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, (5-methyl-3-isoxazolyl)methyl ester (9CI) (CA INDEX NAME)



RN 262439-99-6 CAPLUS

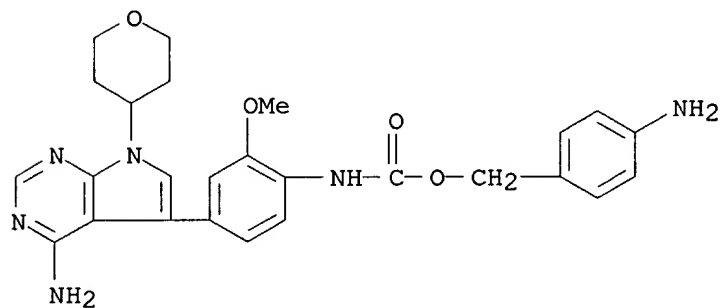
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, [(2S)-5-oxo-2-pyrrolidinyl]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

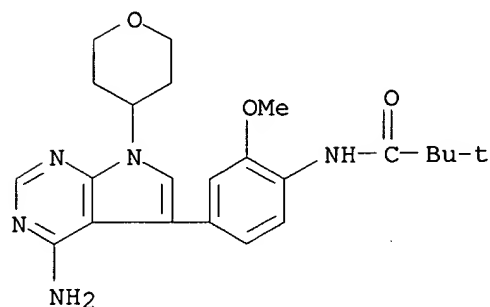


RN 262440-00-6 CAPLUS

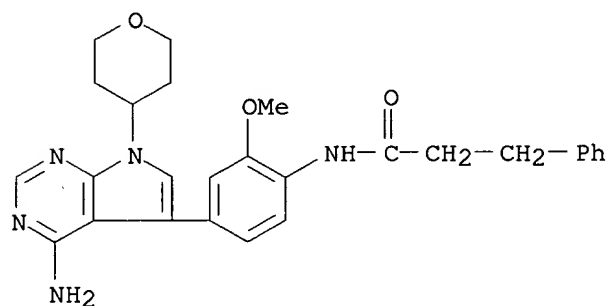
CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, (4-aminophenyl)methyl ester (9CI) (CA INDEX NAME)



RN 262440-04-0 CAPLUS
 CN Propanamide, N-[4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

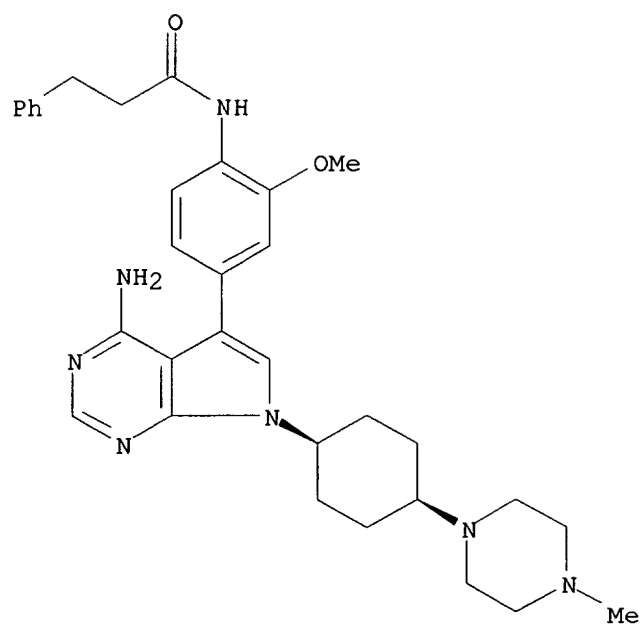


RN 262440-06-2 CAPLUS
 CN Benzenepropanamide, N-[4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]- (9CI) (CA INDEX NAME)



RN 262442-22-8 CAPLUS
 CN Benzenepropanamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]- (9CI) (CA INDEX NAME)

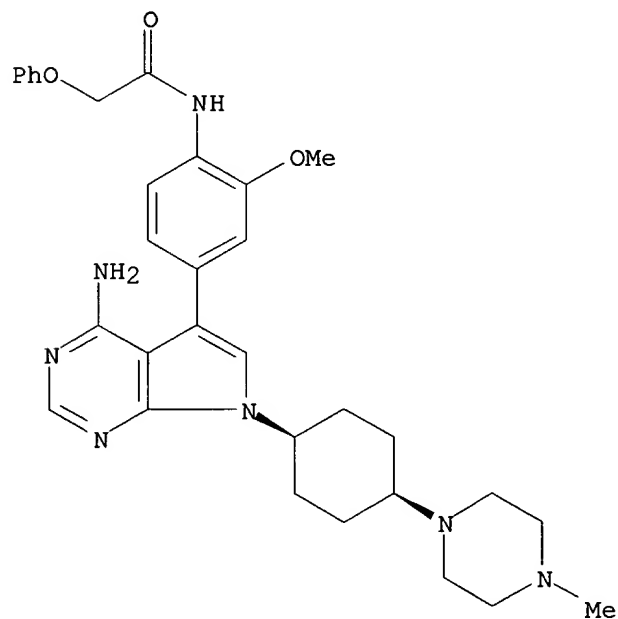
Relative stereochemistry.



RN 262442-32-0 CAPLUS

CN Acetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-phenoxy- (9CI) (CA INDEX NAME)

Relative stereochemistry.



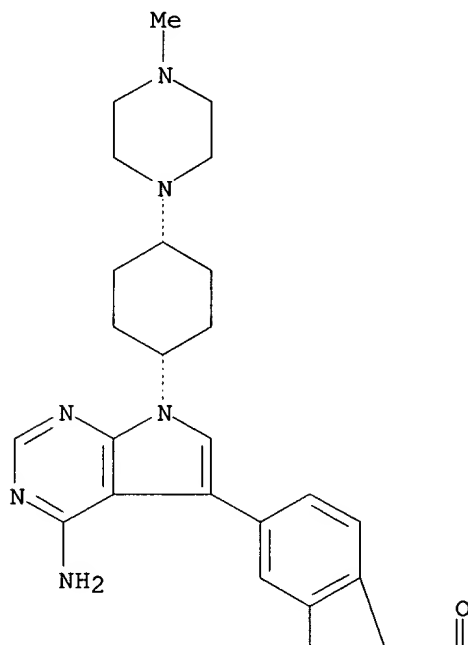
RN 262442-33-1 CAPLUS

CN Acetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-

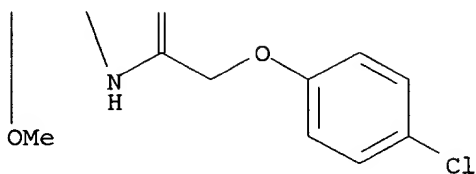
pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-(4-chlorophenoxy)- (9CI)
(CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



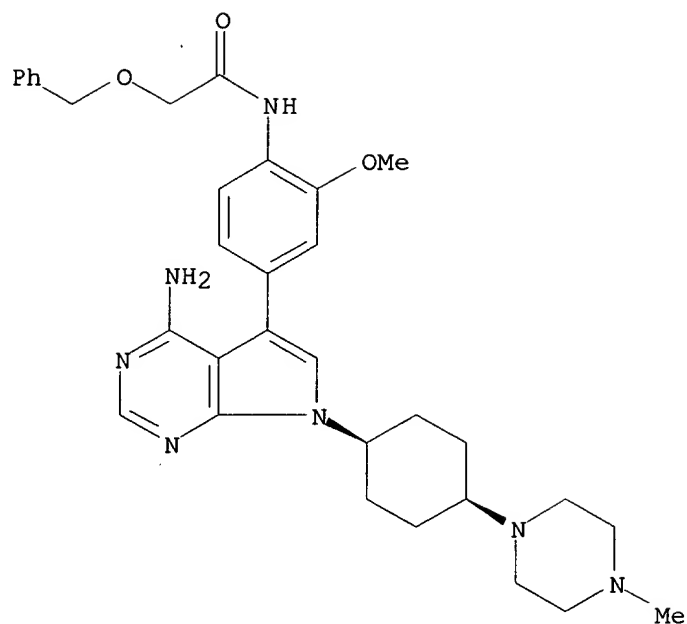
PAGE 2-A



RN 262442-39-7 CAPLUS

CN Acetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-(phenylmethoxy)- (9CI)
(CA INDEX NAME)

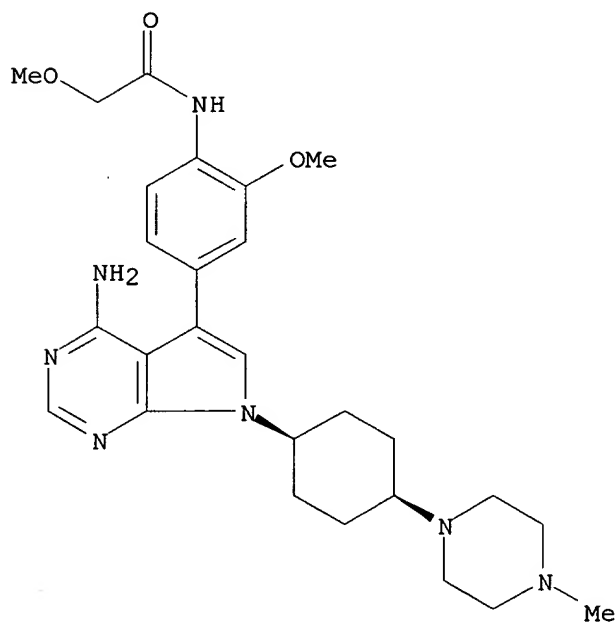
Relative stereochemistry.



RN 262442-47-7 CAPLUS

CN Acetamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-methoxy- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 262442-80-8 CAPLUS

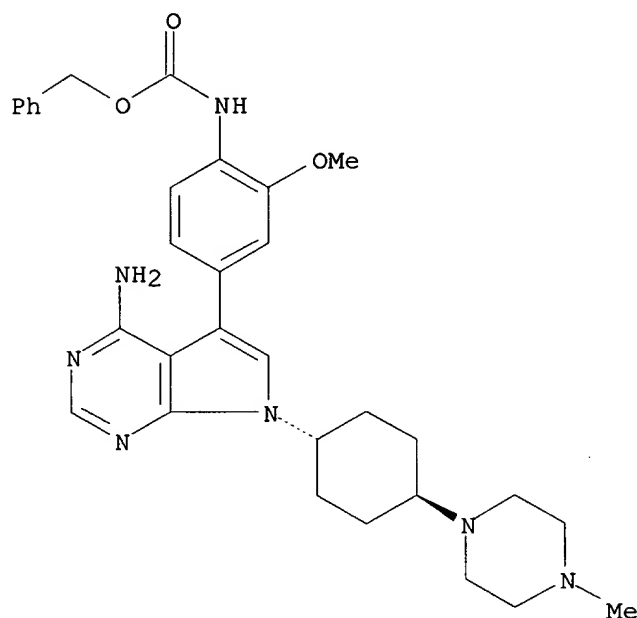
CN Carbamic acid, [4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-2-methoxy- (9CI) (CA INDEX NAME)

7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, phenylmethyl ester,
(2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262442-79-5
CMF C32 H39 N7 O3

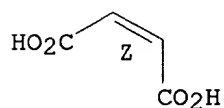
Relative stereochemistry.



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



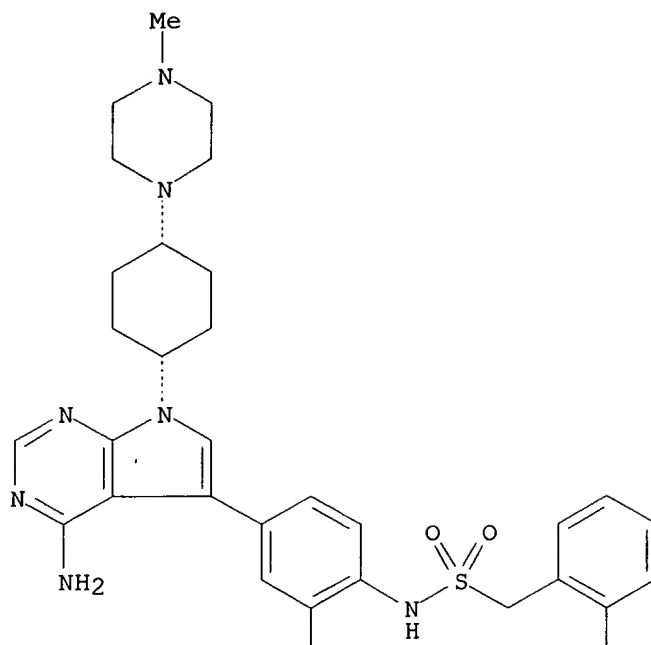
RN 262443-69-6 CAPLUS
CN Benzenemethanesulfonamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-fluorophenyl]-2-nitro-, (2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262443-68-5
CMF C30 H35 F N8 O4 S

Relative stereochemistry.

PAGE 1-A



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F

NO₂

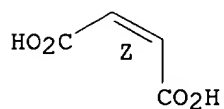
CM 2

CRN 110-16-7

CMF C4 H4 O4

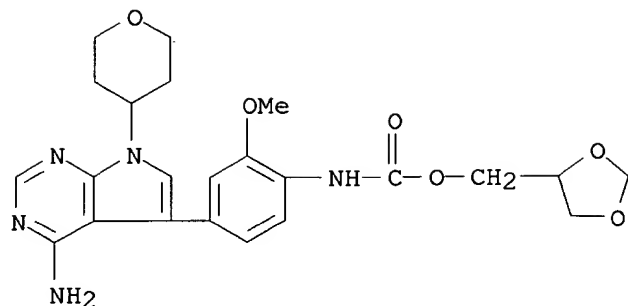
CDES 2:Z

Double bond geometry as shown.



RN 262443-91-4 CAPLUS

CN Carbamic acid, [4-[4-amino-7-(tetrahydro-2H-pyran-4-yl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, 1,3-dioxolan-4-ylmethyl ester (9CI)
(CA INDEX NAME)



RN 262444-01-9 CAPLUS

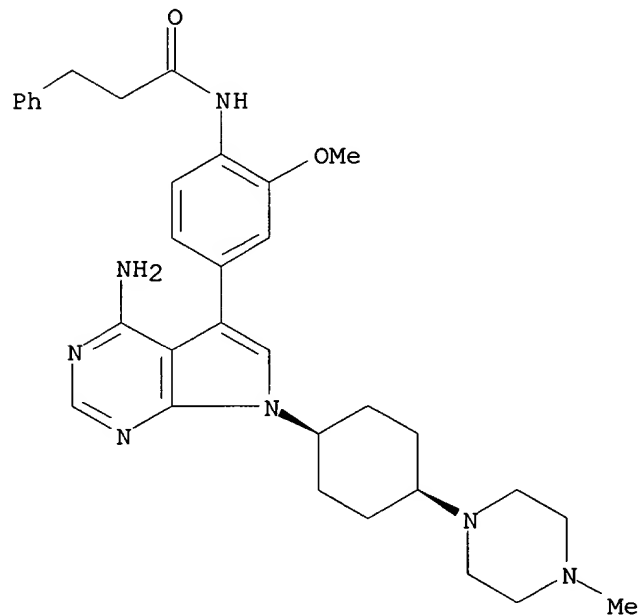
CN Benzenepropanamide, N-[4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, (2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262442-22-8

CMF C33 H41 N7 O2

Relative stereochemistry.



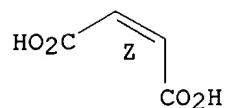
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

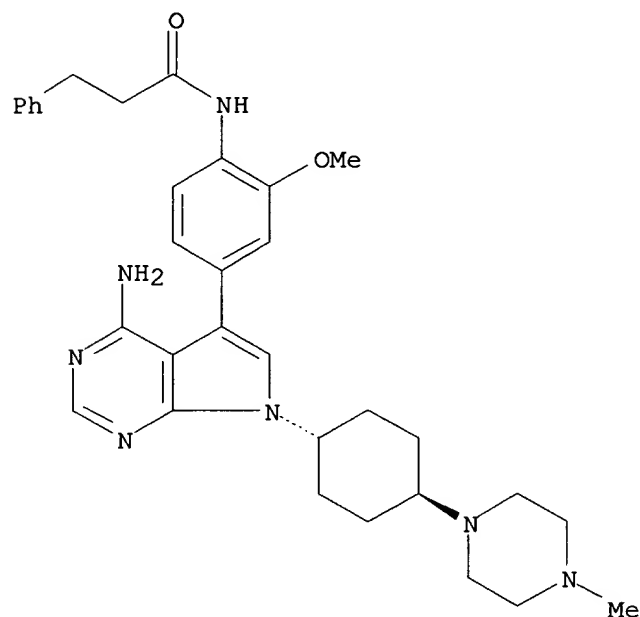
Double bond geometry as shown.



RN 262444-02-0 CAPLUS

CN Benzenepropanamide, N-[4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-(9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 262444-03-1 CAPLUS

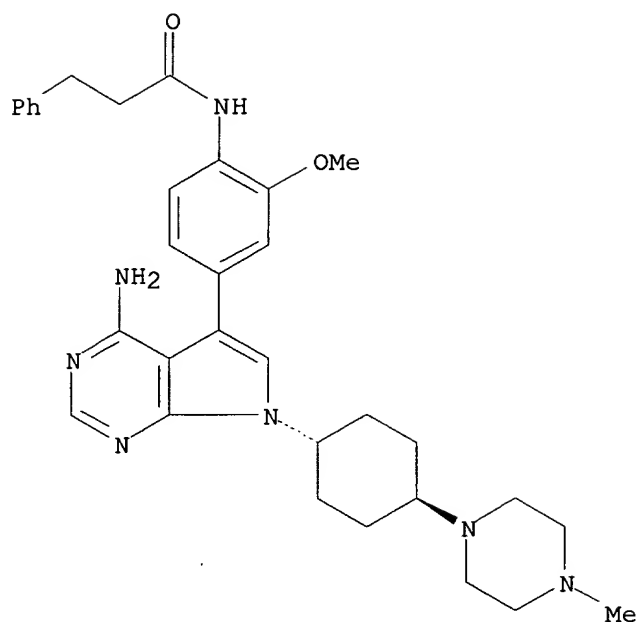
CN Benzenepropanamide, N-[4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-(2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262444-02-0

CMF C33 H41 N7 O2

Relative stereochemistry.



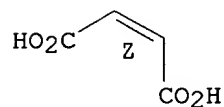
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



RN 262444-68-8 CAPLUS

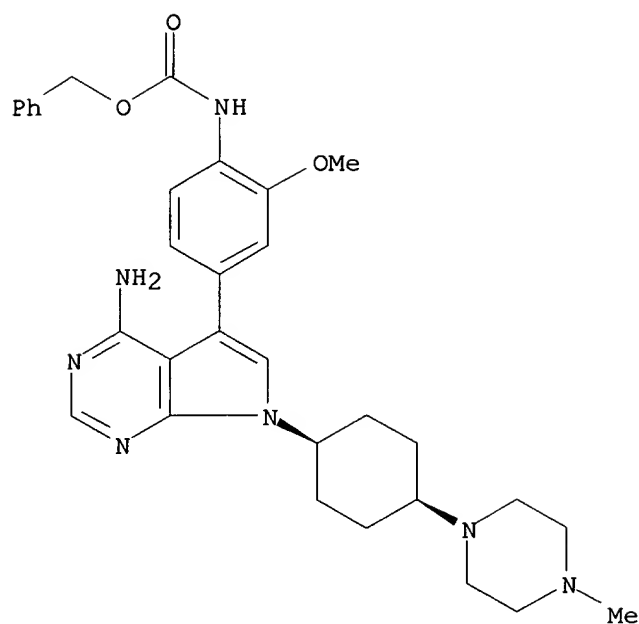
CN Carbamic acid, [4-[4-amino-7-[cis-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxyphenyl]-, phenylmethyl ester, (2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 262444-67-7

CMF C32 H39 N7 O3

Relative stereochemistry.



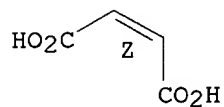
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



RN 262445-41-0 CAPLUS

CN Benzenesulfonamide, N-[4-[4-amino-7-[trans-4-(4-methyl-1-piperazinyl)cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-fluorophenyl]-2-nitro-, (2Z)-2-butenedioate (1:3) (9CI) (CA INDEX NAME)

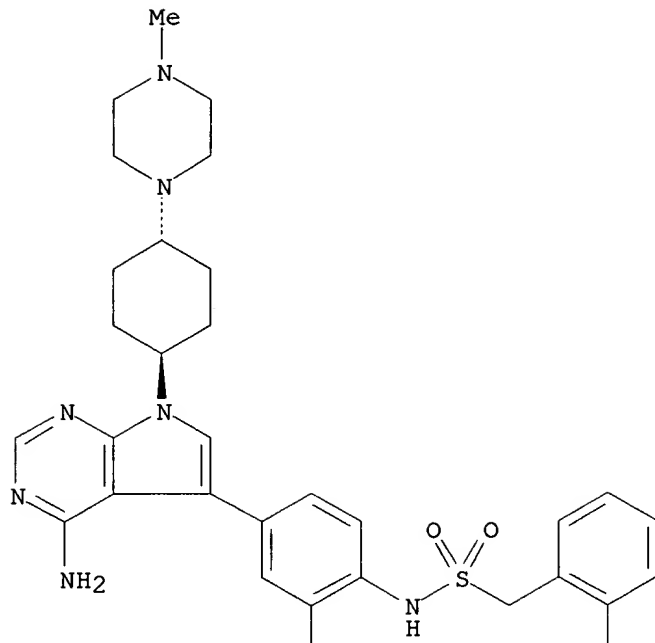
CM 1

CRN 262445-40-9

CMF C30 H35 F N8 O4 S

Relative stereochemistry.

PAGE 1-A



PAGE 2-A

F

NO₂

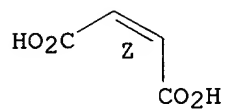
CM 2

CRN 110-16-7

CMF C4 H4 O4

CDES 2:Z

Double bond geometry as shown.



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS
 AN 2000:210171 CAPLUS
 DN 132:251159
 TI Preparation of 4-aminopyrrolopyrimidines as protein kinase inhibitors
 IN Calderwood, David; Arnold, Lee D.; Mazdiyasni, Hormoz; Hirst, Gavin; Deng, Bojuan B.
 PA BASF Aktiengesellschaft, Germany
 SO PCT Int. Appl., 242 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000017202	A1	20000330	WO 1999-US21536	19990917
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 9960475	A1	20000410	AU 1999-60475	19990917
	EP 1114052	A1	20010711	EP 1999-969414	19990917
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	BR 9913888	A	20020108	BR 1999-13888	19990917
	NO 2001001357	A	20010514	NO 2001-1357	20010316
PRAI	US 1998-100954P	P	19980918		
	WO 1999-US21536	W	19990917		

OS MARPAT 132:251159

AB 7H-Pyrrolo[2,3-d]pyrimidin-4-amines (I) [wherein A = (un)substituted 6-membered arom. ring or 5- or 6-membered heteroarom. ring; L = RbN(R)S(O)₂, RbN(R)P(O), or RbN(R)P(O)O, where Rb = alkylene group which when taken together with the sulfonamide, phosphinamide or phosphonamide group to which it is bound forms a 5- or 6-membered ring fused to ring A, or L = O, S, N(R), 5-, 6-, or 7-membered (oxa)azaphosphaarom. or (oxa)azaphosphacycloalkyl ring, or a variety of linkers contg. functional groups; R = H, acyl, or (un)substituted aliph., (hetero)arom., or cycloalkyl; R1 = H, 2-Ph-1,3-dioxan-5-yl or (un)substituted (cyclo)alkyl, cycloalkenyl, or phenylalkyl; R2 = H, halo, OH, CN, (un)substituted aliph., cycloalkyl, (hetero)arom., (hetero)aralkyl, amino, or amido; R3 (un)substituted aliph., alkenyl, (hetero)cycloalkyl, or (hetero)arom.; n = 0-6], and physiol. acceptable salts and metabolites thereof, were prepd. For example, II was prepd. in a 6-step sequence involving: (1) amine protection of 4-bromo-2-methoxyaniline with di-tert-Bu dicarbonate, (2) 4-addn. of diboron pinacol ester, (3) 4-substitution with 4-chloro-7-cyclopentyl-5-iodo-7H-pyrrolo[2,3-d]pyrimidine, (4) deprotection of the amine with F3CCO₂H, (5) 4-amination of the pyrrolopyrimidine, and (6) addn. of 4-cyanobenzenesulfonyl chloride to the anilino amine. I inhibit serine/threonine and tyrosine kinase activity, affecting immunol., hyperproliferative, and angiogenic processes. All exemplified compds. significantly inhibited either FGFR, PDGFR, KDR, Tie-2, Lck, Fyn, Blk, Lyn, or Src at concns. of .ltoreq. 50 .mu.M, and some significantly inhibited cdc2 at concns. of 50 .ltoreq. .mu.M. Thus, these compds. are useful in the treatment of cancer and hyperproliferative

*Applicant's
PCT*

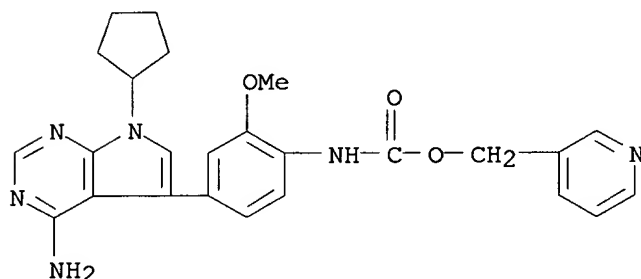
disorders, rheumatoid arthritis, disorders of the immune system, transplant rejections, and inflammatory disorders.

IT **262433-21-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(intermediate; prepn. of 7H-pyrrolo[2,3-d]pyrimidin-4-amines as protein kinase inhibitors)

RN 262433-21-6 CAPLUS

CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]-, 3-pyridinylmethyl ester (9CI) (CA INDEX NAME)

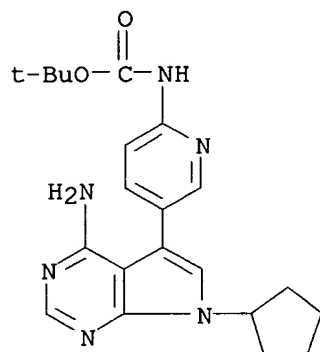


IT **262433-14-7P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of 7H-pyrrolo[2,3-d]pyrimidin-4-amines as protein kinase inhibitors)

RN 262433-14-7 CAPLUS

CN Carbamic acid, [5-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-pyridinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



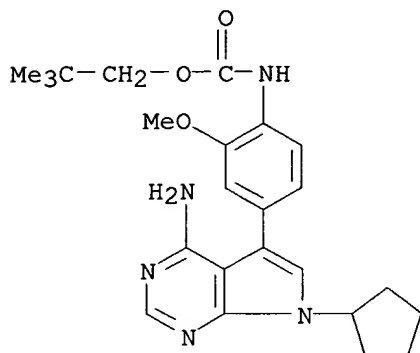
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262430-24-0P 262430-25-1P 262430-26-2P
262430-27-3P 262430-28-4P 262430-29-5P
262430-30-8P 262430-31-9P 262430-32-0P
262430-33-1P 262430-34-2P 262430-35-3P
262432-67-7P 262432-68-8P 262432-69-9P
262433-00-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (target compd.; prepn. of 7H-pyrrolo[2,3-d]pyrimidin-4-amines as protein kinase inhibitors)

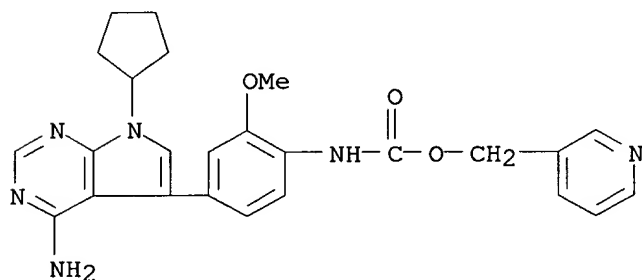
RN 262430-19-3 CAPLUS

CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]-, 2,2-dimethylpropyl ester (9CI) (CA INDEX NAME)



RN 262430-20-6 CAPLUS

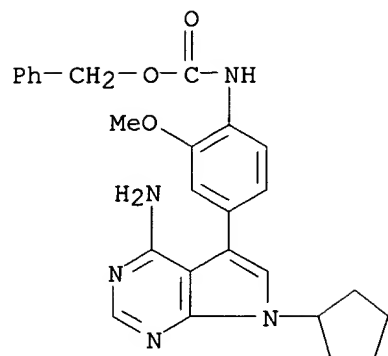
CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]-, 3-pyridinylmethyl ester, hydrochloride (9CI) (CA INDEX NAME)



●x HCl

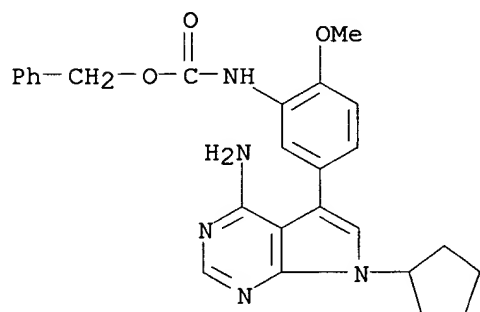
RN 262430-23-9 CAPLUS

CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



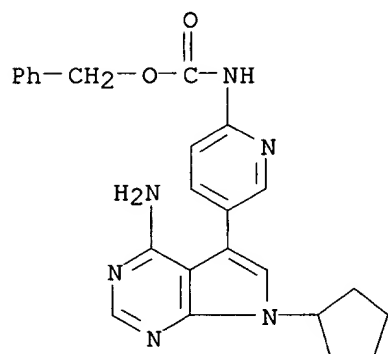
RN 262430-24-0 CAPLUS

CN Carbamic acid, [5-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



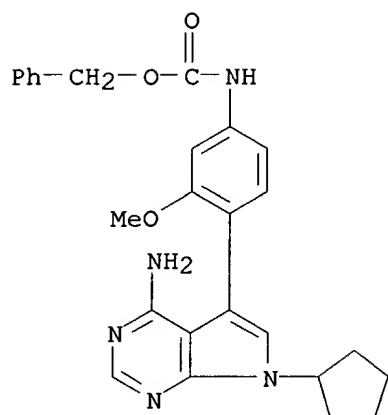
RN 262430-25-1 CAPLUS

CN Carbamic acid, [5-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-pyridinyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



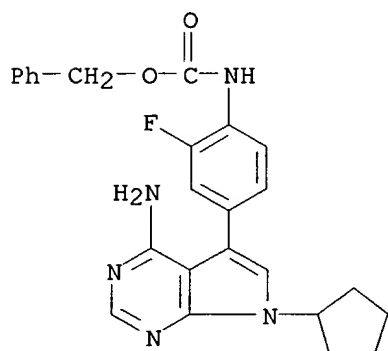
RN 262430-26-2 CAPLUS

CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-3-methoxyphenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



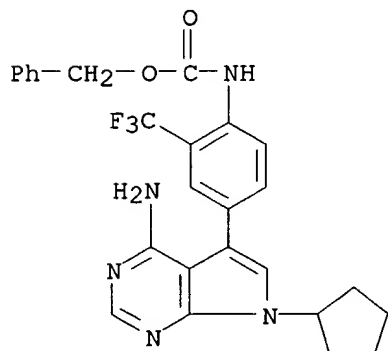
RN 262430-27-3 CAPLUS

CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 262430-28-4 CAPLUS

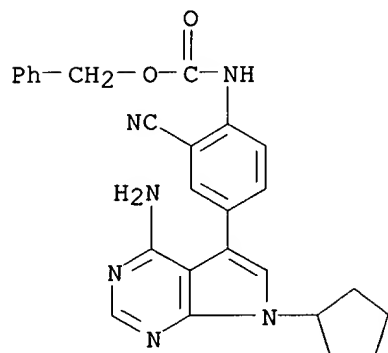
CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-(trifluoromethyl)phenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 262430-29-5 CAPLUS

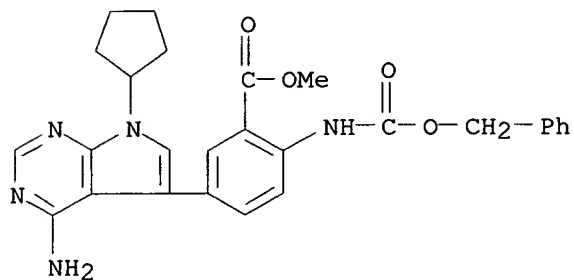
CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-

2-cyanophenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



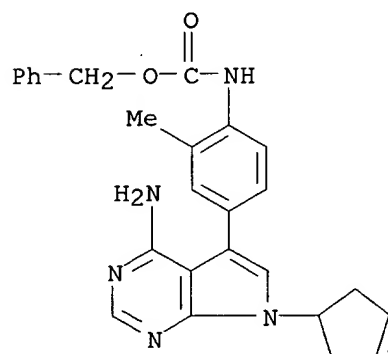
RN 262430-30-8 CAPLUS

CN Benzoic acid, 5-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-[[phenylmethoxy]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



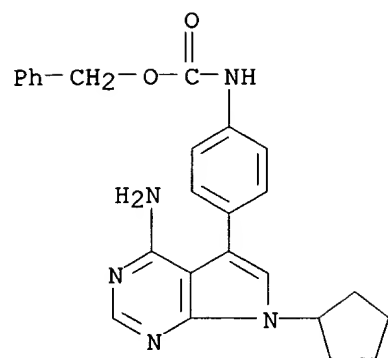
RN 262430-31-9 CAPLUS

CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methylphenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



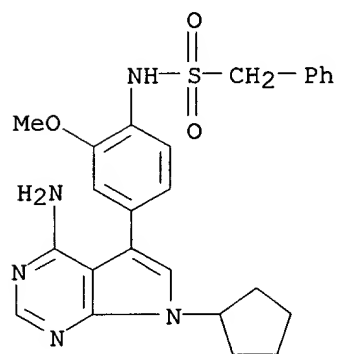
RN 262430-32-0 CAPLUS

CN Carbamic acid, [4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)phenyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



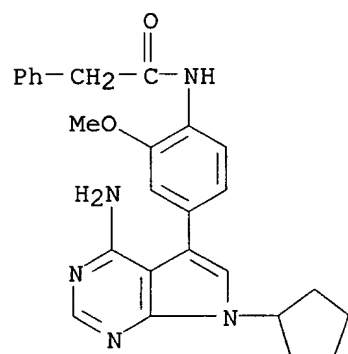
RN 262430-33-1 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]- (9CI) (CA INDEX NAME)



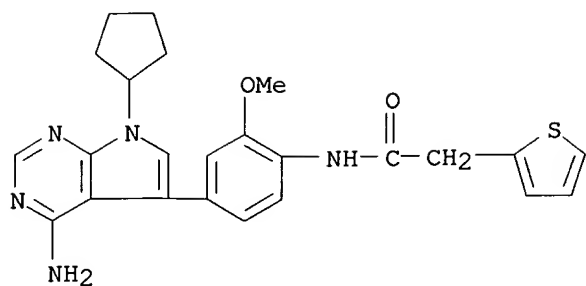
RN 262430-34-2 CAPLUS

CN Benzeneacetamide, N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]- (9CI) (CA INDEX NAME)



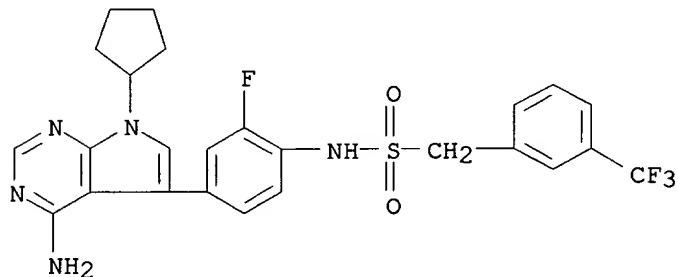
RN 262430-35-3 CAPLUS

CN 2-Thiopheneacetamide, N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]- (9CI) (CA INDEX NAME)



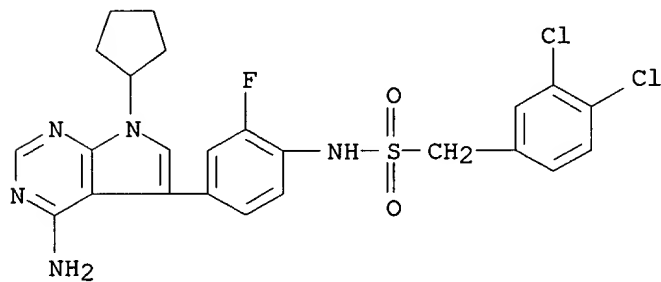
RN 262432-67-7 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



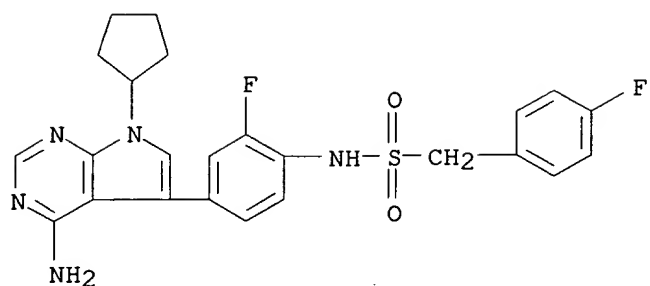
RN 262432-68-8 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl]-3,4-dichloro- (9CI) (CA INDEX NAME)



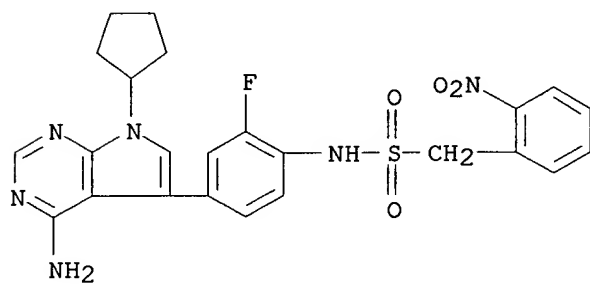
RN 262432-69-9 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl]-4-fluoro- (9CI) (CA INDEX NAME)



RN 262433-00-1 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-fluorophenyl]-2-nitro- (9CI) (CA INDEX NAME)



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 11:32:18 ON 17 MAY 2002)

FILE 'REGISTRY' ENTERED AT 11:32:24 ON 17 MAY 2002

L1 STRUCTURE UPLOADED
 L2 4 S L1
 L3 61 S L1 SSS FUL

FILE 'CAPLUS' ENTERED AT 11:34:00 ON 17 MAY 2002

L4 3 S L3

FILE 'CAOLD' ENTERED AT 11:34:42 ON 17 MAY 2002

=> s l3

L5 0 L3

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.38

155.19

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-1.86

STN INTERNATIONAL LOGOFF AT 11:34:56 ON 17 MAY 2002

09/399,083

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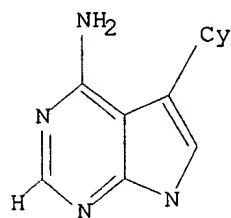
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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 319 TO ITERATE

100.0% PROCESSED 319 ITERATIONS

21 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 5309 TO 7451

PROJECTED ANSWERS: 146 TO 694

L2 21 SEA SSS SAM L1

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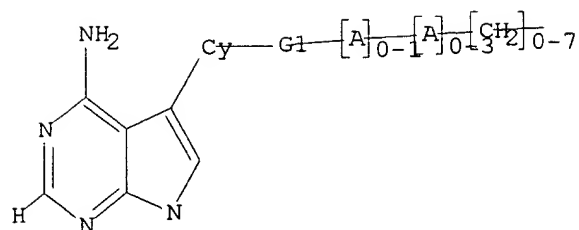
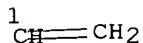
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L3 STRUCTURE UPLOADED

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L3 HAS NO ANSWERS

L3 STR



G1 O, S, N, CH2, CH, [01-02]

Structure attributes must be viewed using STN Express query preparation.

=> s l3 sss sam

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 SAMPLE SCREEN SEARCH COMPLETED - 318 TO ITERATE
 100.0% PROCESSED 318 ITERATIONS
 SEARCH TIME: 00.00.01

7 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
 PROJECTED ITERATIONS: 5291 TO 7429
 PROJECTED ANSWERS: 7 TO 298

L4 7 SEA SSS SAM L3

=> d his

(FILE 'HOME' ENTERED AT 16:50:35 ON 06 MAR 2000)

FILE 'REGISTRY' ENTERED AT 16:50:52 ON 06 MAR 2000
 L1 STRUCTURE UPLOADED
 L2 21 S L1 SSS SAM

FILE 'STNGUIDE' ENTERED AT 16:52:10 ON 06 MAR 2000

FILE 'REGISTRY' ENTERED AT 17:00:44 ON 06 MAR 2000
 L3 STRUCTURE UPLOADED
 L4 7 S L3 SSS SAM

=> s l3 sss ful

FULL SEARCH INITIATED 17:03:39 FILE 'REGISTRY'

09/399,083

FULL SCREEN SEARCH COMPLETED - 6282 TO ITERATE
100.0% PROCESSED 6282 ITERATIONS
SEARCH TIME: 00.00.04

142 ANSWERS

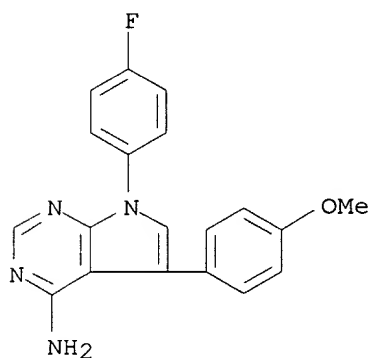
L5 142 SEA SSS FUL L3

=> s 15

L6 10 L5

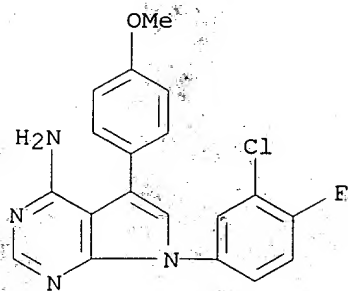
=> d 16 1-10 bib,ab,hitstr

L6 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2000 ACS
 AN 1999:457818 CAPLUS
 DN 131:214251
 TI Synthesis and reactions of fluoroaryl substituted 2-amino-3-cyanopyrroles and pyrrolo[2,3-d]pyrimidines
 AU Dave, Chaitanya G.; Desai, Nirmal D.
 CS Organic Syntheses Laboratory, M. G. Science Institute, Ahmedabad, 380 009, India
 SO J. Heterocycl. Chem. (1999), 36(3), 729-733
 CODEN: JHTCAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 AB Some fluoroaryl substituted 2-amino-3-cyanopyrroles were synthesized from the reaction between (2-bromo-1-arylalkylidene)propanedinitriles and fluoroaryl substituted arom. amines under Gewald reaction condition, which on reaction with formamide and formic acid gave 4-aminopyrrolo[2,3-d]pyrimidines and pyrrolo[2,3-d]-pyrimidin-4(3H)-ones (4), resp. 4-Chloropyrrolo[2,3-d]pyrimidines were prepd. by chlorination of 4 with P oxychloride, which on hydrazinolysis provided 4-hydrazinopyrrolo[2,3-d]pyrimidines.
 IT **243665-89-6P 243665-90-9P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and reactions of fluoroaryl substituted aminocyanopyrroles and pyrrolo[2,3-d]pyrimidines)
 RN 243665-89-6 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(4-fluorophenyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 243665-90-9 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(3-chloro-4-fluorophenyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

09/399,083



L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2000 ACS

AN 1999:309002 CAPLUS

DN 131:124921

TI A novel inhibitor of the tyrosine kinase Src suppresses phosphorylation of

its major cellular substrates and reduces bone resorption in vitro and in rodent models in vivo

AU Missbach, M.; Jeschke, M.; Feyen, J.; Muller, K.; Glatt, M.; Green, J.; Susa, M.

CS Novartis Pharma AG, Research Bone Metabolism, Basel, CH-4002, Switz.

SO Bone (N. Y.) (1999), 24(5), 437-449

CODEN: BONEDL; ISSN: 8756-3282

PB Elsevier Science Inc.

DT Journal

LA English

AB The tyrosine kinase Src has been implicated in the process of osteoclast-mediated bone resorption. Here, we describe a novel class of Src inhibitors, substituted 5,7-diphenyl-pyrrolo[2,3-d]pyrimidines, and characterize one of them, CGP77675, in vitro and in models of bone resorption in vivo. In vitro, CGP77675 inhibited phosphorylation of peptide substrates and autophosphorylation of purified Src (concn. producing half-maximal inhibition [IC50] values 5-20 and 40 nmol/L, resp.). The compd. was selective toward other protein kinases: the Src IC50 value was lower than those for Cdc2 (>500-fold), epidermal growth factor (EGF) receptor (7.5-fold), and vascular endothelial growth factor receptor (>50-fold), and for v-Abl (15-fold) and focal adhesion kinase (Fak) (>25-fold). The Src kinase family members Lck and Yes were inhibited with IC50 values 20-fold higher than or equal to Src. To measure the inhibition of cellular Src activity, we identified the major tyrosine-phosphorylated proteins in an Src-overexpressing cell line IC8.1 as Src, Fak, and paxillin. CGP77675 potently inhibited tyrosine phosphorylation of the Src substrates Fak and paxillin, but had much less effect on Src (IC50 values 0.3, 0.5, and 5.7 .mu.mol/L). The phosphorylation of Src in IC8.1 cells reflected phosphorylation of the neg. regulatory tyrosine 527 (Y527); thus, the inhibitor was selective against the Y527 C-terminal Src kinase Csk. In osteoblastic MC3T3-E1 cells, CGP77675 inhibited signaling induced by PDGF at the receptor level,

but not signaling by EGF, basic fibroblast growth factor, insulin-like growth factor-1, and phorbol 12-myristate 13-acetate. The effect of CGP77675 on bone resorption was evaluated in vitro and in vivo. The parathyroid hormone-induced bone resorption in rat fetal long bone cultures was inhibited with an IC50 of 0.8 .mu.mol/L. CGP77675 dose-dependently reduced the hypercalcemia induced in mice by interleukin-1.beta. and partly prevented bone loss and microarchitectural changes in young ovariectomized rats, showing that the protective effect on bone was exerted via the inhibition of bone resorption. Thus, specific

Src family kinase inhibitors may be useful for the treatment of diseases assocd. with elevated bone loss.

IT 234772-58-8 234772-59-9 234772-60-2

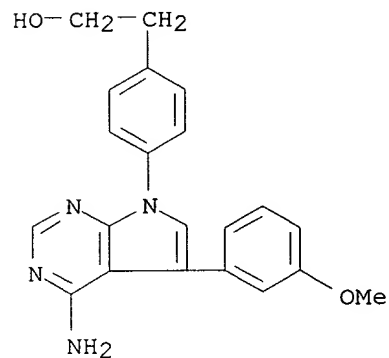
234772-61-3 234772-62-4 234772-63-5

RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)

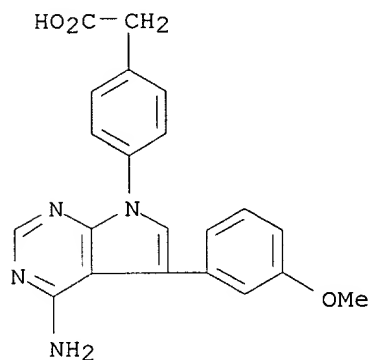
(inhibitor of tyrosine kinase Src suppresses phosphorylation of its major cellular substrates and reduces bone resorption in vitro and in

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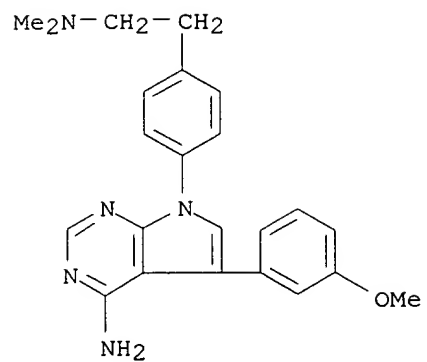
rodent models in vivo)
RN 234772-58-8 CAPLUS
CN Benzeneethanol,
4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-
7-yl]- (9CI) (CA INDEX NAME)



RN 234772-59-9 CAPLUS
CN Benzeneacetic acid, 4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-
d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



RN 234772-60-2 CAPLUS
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
7-[4-[2-(dimethylamino)ethyl]phenyl]-5-
(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



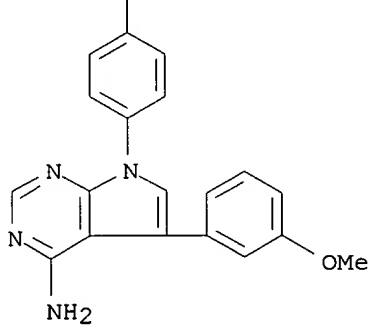
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RN 234772-61-3 CAPLUS

CN Ethanol,

2-[[2-[4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)

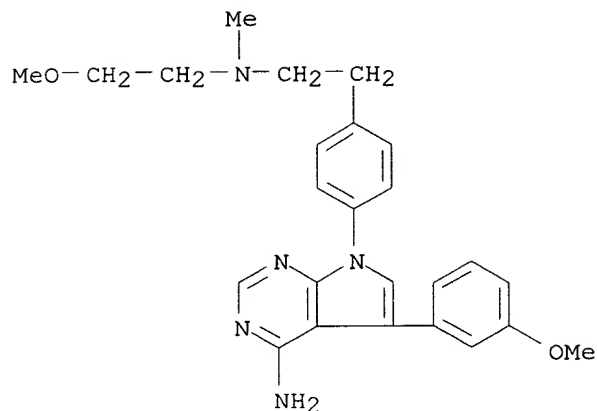
HO-CH₂-CH₂-NH-CH₂-CH₂



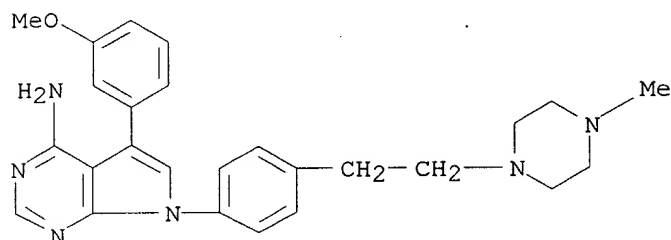
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RN 234772-62-4 CAPLUS

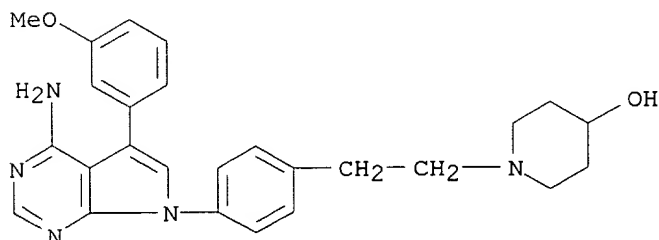
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[4-[2-[(2-methoxyethyl)methylamino]ethyl]phenyl]-5-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 234772-63-5 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 5-(3-methoxyphenyl)-7-[4-[2-(4-methyl-
 1-piperazinyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)

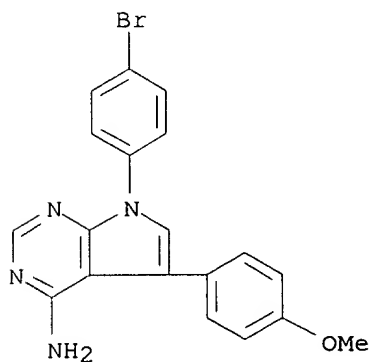


IT **234772-64-6**
 RL: BAC (Biological activity or effector, except adverse); PRP
 (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (inhibitor of tyrosine kinase Src suppresses phosphorylation of its
 major cellular substrates and reduces bone resorption in vitro and in
 rodent models in vivo)
 RN 234772-64-6 CAPLUS
 CN 4-Piperidinol, 1-[2-[4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-
 d]pyrimidin-7-yl]phenyl]ethyl]- (9CI) (CA INDEX NAME)



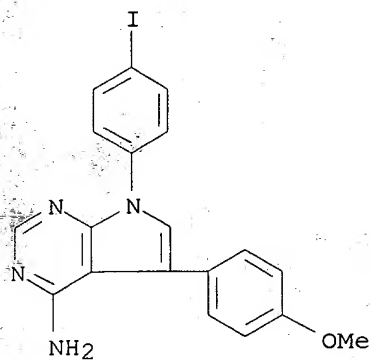
09/399,083

L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2000 ACS
 AN 1999:51036 CAPLUS
 DN 130:196617
 TI Synthesis of 7H-Tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive ring cleavage to 4-aminopyrrolo[2,3-d]pyrimidines
 AU Dave, Chaitanya G.; Shah, Rina D.
 CS Organic Syntheses Laboratory, M. G. Science Institute, Ahmedabad, 300 009, India
 SO J. Heterocycl. Chem. (1998), 35(6), 1295-1300
 CODEN: JHTCAD; ISSN: 0022-152X
 PB HeteroCorporation
 DT Journal
 LA English
 AB Some new 7,9-disubstituted 7H-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines (I; R = H, MeO, Cl; R1 = MeO, Br, I, Me) have been synthesized either by diazotization of 4-hydrazino-7H-pyrrolo[2,3-d]pyrimidines (II; same R, R1; R2 = NHNH2), obtained by hydrazinolysis of II (R2 = Cl) or via a substitution reaction between II (R2 = Cl) and sodium azide. 5,7-Disubstituted 7H-pyrrolo[2,3-d]pyrimidin-4(3H)-ones were obtained by cyclocondensation of 1,4-disubstituted 2-amino-3-cyanopyrroles with formic acid; subsequent chlorination using phosphorus oxychloride afforded II (R2 = Cl). A novel route to II (R2 = NH2) via reductive ring cleavage of I has been reported.
 IT **121405-32-1P 121405-33-2P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of 7H-tetrazolo[1,5-c]pyrrolo[3,2-e]pyrimidines and their reductive ring cleavage to 4-aminopyrrolo[2,3-d]pyrimidines)
 RN 121405-32-1 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(4-bromophenyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 121405-33-2 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(4-iodophenyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

09/399,083



8

L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2000 ACS

AN 1998:640260 CAPLUS

DN 129:275922

TI Preparation of pyrrolo[2,3-d]pyrimidines as tyrosine kinase inhibitors

IN Calderwood, David John; Johnston, David Norman; Rafferty, Paul; Twigger, Helen Louise; Munschauer, Rainer; Arnold, Lee

PA Knoll A.-G., Germany

SO PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9841525	A1	19980924	WO 1998-EP1357	19980309
	W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				

SE

	AU 9868293	A1	19981012	AU 1998-68293	19980309
	EP 970084	A1	20000112	EP 1998-913690	19980309
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
	NO 9904509	A	19990917	NO 1999-4509	19990917

PRAI US 1997-40836 19970319

WO 1998-EP1357 19980309

OS MARPAT 129:275922

AB The title compds. [I; R1 = H, 2-phenyl-1,3-dioxan-5-yl, C1-6 alkyl, etc.; R2 = H, C1-6 alkyl, C3-8 cycloalkyl, etc.; R3 = (un)substituted II (A = NH, O, NHSO₂, etc.; R5 = (un)substituted Ph, and, addnl., when A is

absent

R5 = phthalimido optionally substituted by halo, (un)substituted pyrazolylamino)], useful in treating proliferative diseases and disorders of the immune system in mammals (no data), were prepd. Thus, heating a mixt. of 2-amino-3-cyano-4-(4-phenoxyphenyl)-1-tert-butylpyrrole (prepn. described), formamide and 4-dimethylaminopyridine at 180.degree. for 6 h afforded I [R1 = tBu; R2 = H; R3 = 4-(PhO)C₆H₄].

IT 213743-29-4P 213743-31-8P 213743-36-3P

213743-38-5P 213743-44-3P 213743-46-5P

213743-52-3P 213743-74-9P 213743-84-1P

213743-90-9P 213743-94-3P 213744-00-4P

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(Reactant);

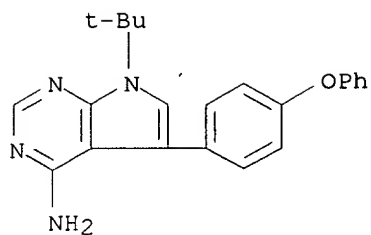
SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrrolo[2,3-d]pyrimidines as tyrosine kinase inhibitors)

RN 213743-29-4 CAPLUS

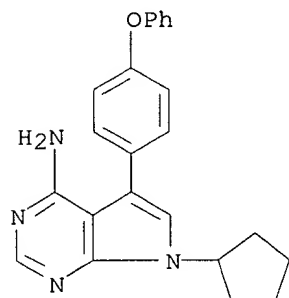
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(1,1-dimethylethyl)-5-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

Applicant's
PCT



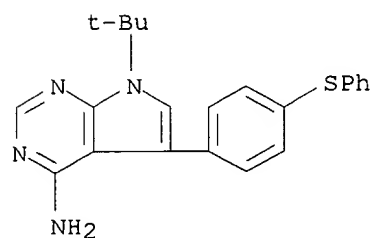
RN 213743-31-8 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-cyclopentyl-5-(4-phenoxyphenyl)-
(9CI) (CA INDEX NAME)



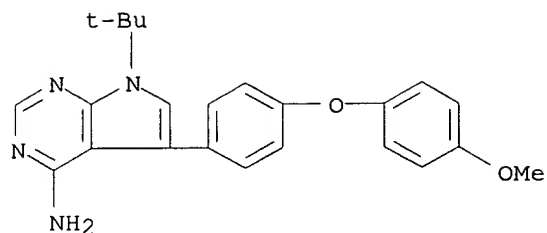
RN 213743-36-3 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(1,1-dimethylethyl)-5-[4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)



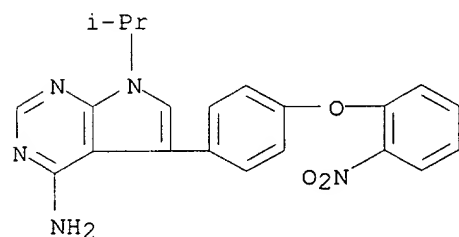
RN 213743-38-5 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(1,1-dimethylethyl)-5-[4-(4-methoxyphenoxy)phenyl]- (9CI) (CA INDEX NAME)



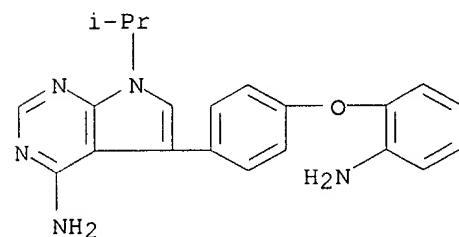
RN 213743-44-3 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(1-methylethyl)-5-[4-(2-nitrophenoxy)phenyl]- (9CI) (CA INDEX NAME)



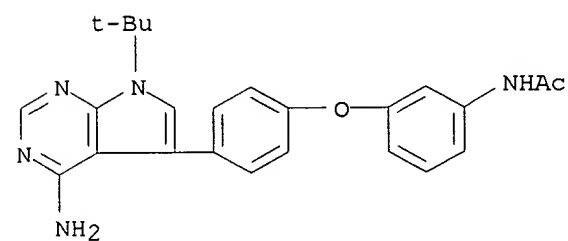
RN 213743-46-5 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[4-(2-aminophenoxy)phenyl]-7-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 213743-52-3 CAPLUS

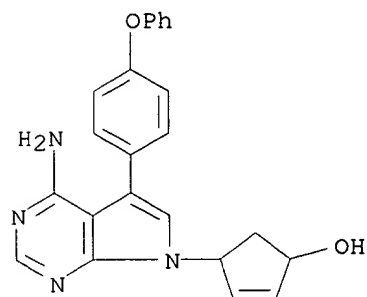
CN Acetamide, N-[3-[4-[4-amino-7-(1,1-dimethylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]phenyl]- (9CI) (CA INDEX NAME)



09/399,083

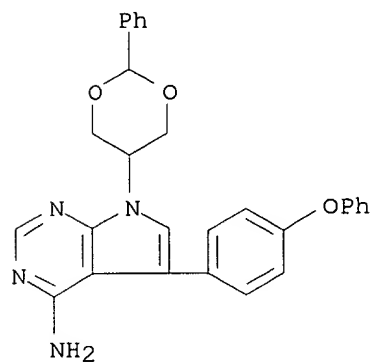
RN 213743-74-9 CAPLUS

CN 2-Cyclopenten-1-ol, 4-[4-amino-5-(4-phenoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



RN 213743-84-1 CAPLUS

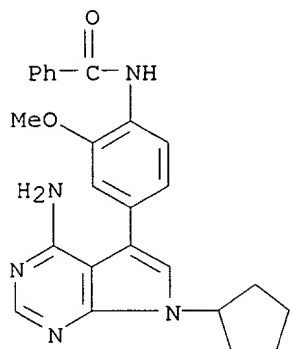
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-phenoxyphenyl)-7-(2-phenyl-1,3-dioxan-5-yl)- (9CI) (CA INDEX NAME)



RN 213743-90-9 CAPLUS

CN Benzamide,

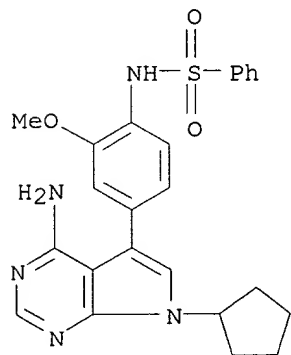
N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]- (9CI) (CA INDEX NAME)



RN 213743-94-3 CAPLUS

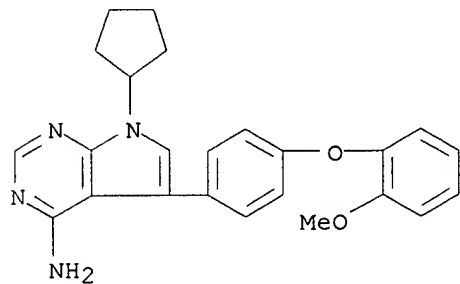
CN Benzenesulfonamide,

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]- (9CI) (CA INDEX NAME)



RN 213744-00-4 CAPLUS

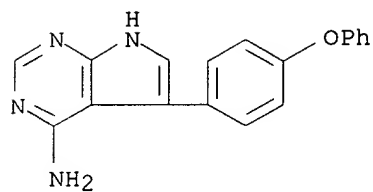
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-cyclopentyl-5-[4-(2-methoxyphenoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 213744-08-2 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-phenoxyphenyl)-, monohydrobromide

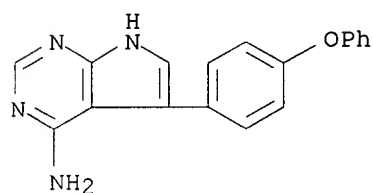
(9CI) (CA INDEX NAME)



● HBr

RN 213744-10-6 CAPLUS

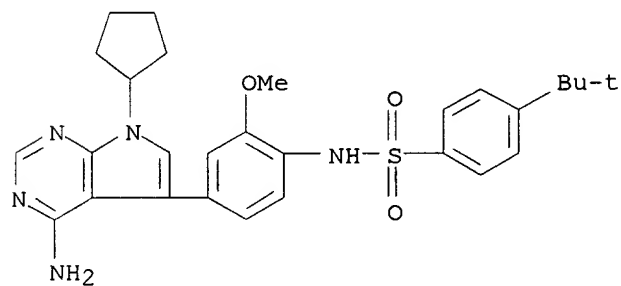
CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



RN 213744-26-4 CAPLUS

CN Benzenesulfonamide,

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxyphenyl]-4-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



IT 213743-30-7P 213743-34-1P 213743-40-9P
 213743-42-1P 213743-48-7P 213743-50-1P
 213743-54-5P 213743-56-7P 213743-58-9P
 213743-60-3P 213743-62-5P 213743-64-7P
 213743-66-9P 213743-68-1P 213743-70-5P
 213743-72-7P 213743-76-1P 213743-78-3P
 213743-80-7P 213743-82-9P 213743-86-3P
 213743-88-5P 213743-92-1P 213743-96-5P

213743-98-7P 213744-02-6P 213744-04-8P

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213744-16-2P 213744-18-4P 213744-20-8P

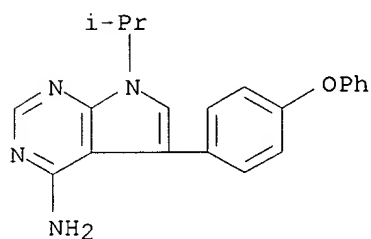
213744-22-0P 213744-24-2P 213744-29-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrrolo[2,3-d]pyrimidines as tyrosine kinase inhibitors)

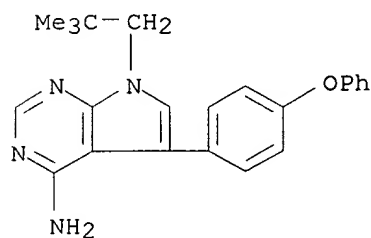
RN 213743-30-7 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
7-(1-methylethyl)-5-(4-phenoxyphenyl)-
(9CI) (CA INDEX NAME)



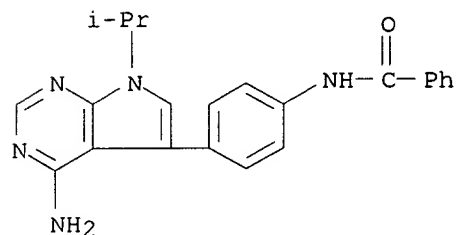
RN 213743-34-1 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(2,2-dimethylpropyl)-5-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



RN 213743-40-9 CAPLUS

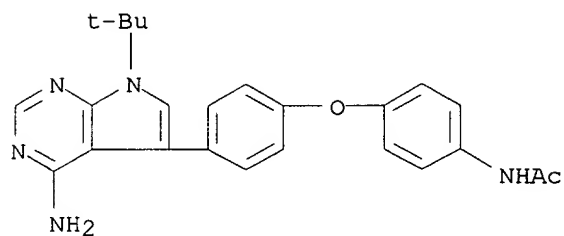
CN Benzamide, N-[4-[4-amino-7-(1-methylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenyl]- (9CI) (CA INDEX NAME)



RN 213743-42-1 CAPLUS

CN Acetamide, N-[4-[4-amino-7-(1,1-dimethylethyl)-7H-pyrrolo[2,3-

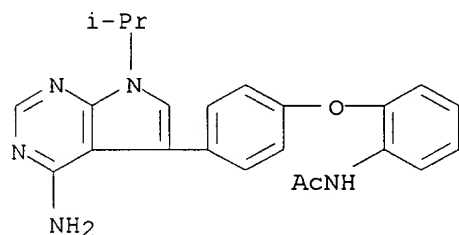
d]pyrimidin-5-yl]phenoxy]phenyl]- (9CI) (CA INDEX NAME)



RN 213743-48-7 CAPLUS

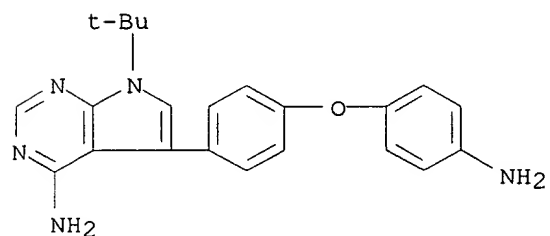
CN Acetamide,

N-[2-[4-[4-amino-7-(1-methylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]phenyl]- (9CI) (CA INDEX NAME)



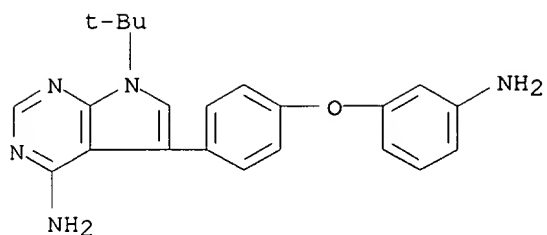
RN 213743-50-1 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[4-(4-aminophenoxy)phenyl]-7-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



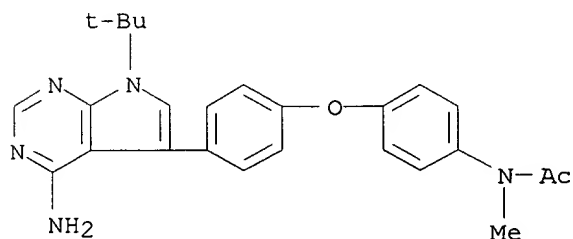
RN 213743-54-5 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[4-(3-aminophenoxy)phenyl]-7-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



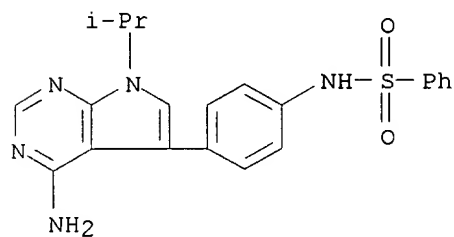
RN 213743-56-7 CAPLUS

CN Acetamide, N-[4-[4-amino-7-(1,1-dimethylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]phenyl]-N-methyl- (9CI) (CA INDEX NAME)



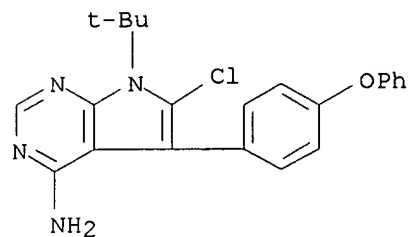
RN 213743-58-9 CAPLUS

CN Benzenesulfonamide, N-[4-[4-amino-7-(1-methylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenyl]- (9CI) (CA INDEX NAME)



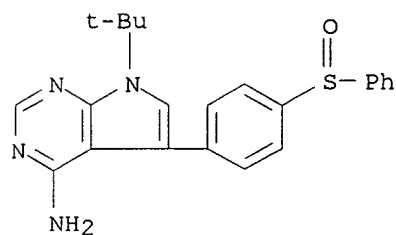
RN 213743-60-3 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 6-chloro-7-(1,1-dimethylethyl)-5-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



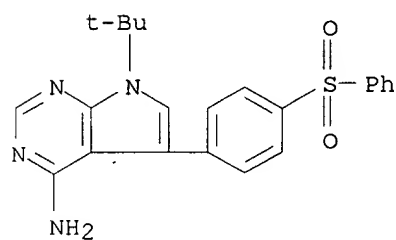
RN 213743-62-5 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(1,1-dimethylethyl)-5-[4-(phenylsulfinyl)phenyl]- (9CI) (CA INDEX NAME)



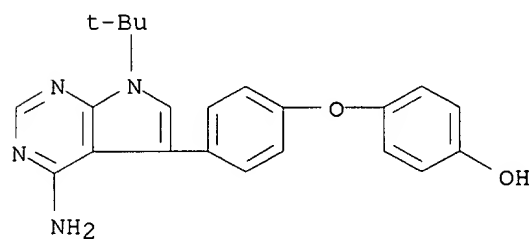
RN 213743-64-7 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(1,1-dimethylethyl)-5-[4-(phenylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



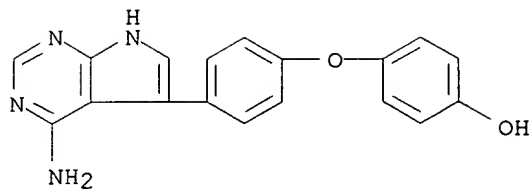
RN 213743-66-9 CAPLUS

CN Phenol, 4-[4-[4-amino-7-(1,1-dimethylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]- (9CI) (CA INDEX NAME)



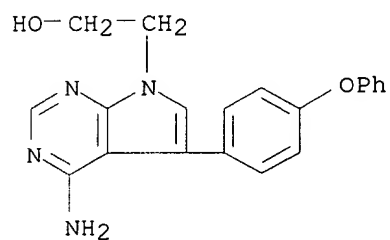
RN 213743-68-1 CAPLUS

CN Phenol, 4-[4-(4-amino-1H-pyrrolo[2,3-d]pyrimidin-5-yl)phenoxy]- (9CI)
(CA INDEX NAME)



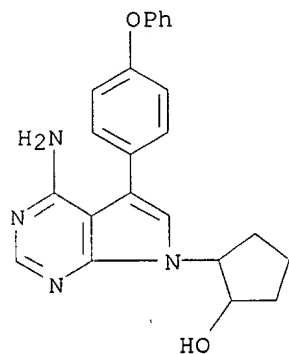
RN 213743-70-5 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidine-7-ethanol, 4-amino-5-(4-phenoxyphenyl)- (9CI)
(CA INDEX NAME)



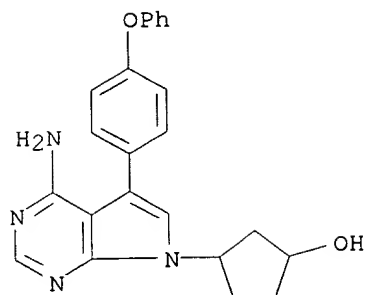
RN 213743-72-7 CAPLUS

CN Cyclopentanol,
2-[4-amino-5-(4-phenoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

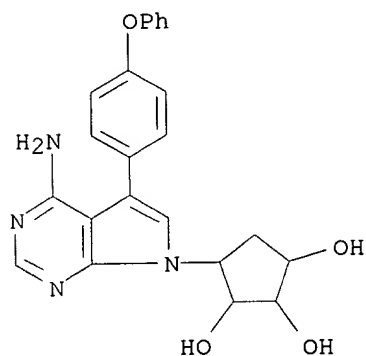


RN 213743-76-1 CAPLUS

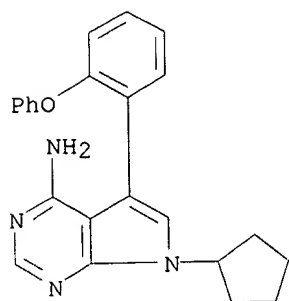
CN Cyclopentanol,
3-[4-amino-5-(4-phenoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



RN 213743-78-3 CAPLUS
 CN 1,2,3-Cyclopentanetriol, 4-[4-amino-5-(4-phenoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

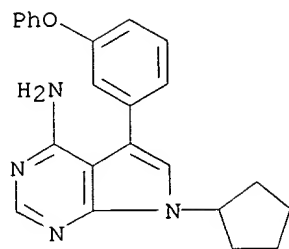


RN 213743-80-7 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-cyclopentyl-5-(2-phenoxyphenyl)- (9CI) (CA INDEX NAME)



RN 213743-82-9 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-cyclopentyl-5-(3-phenoxyphenyl)- (9CI) (CA INDEX NAME)

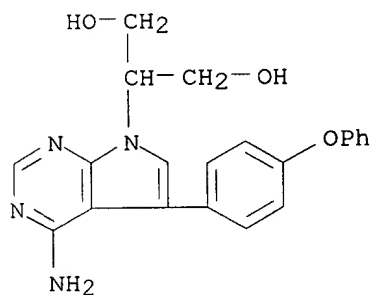
09/399,083



RN 213743-86-3 CAPLUS

CN 1,3-Propanediol,

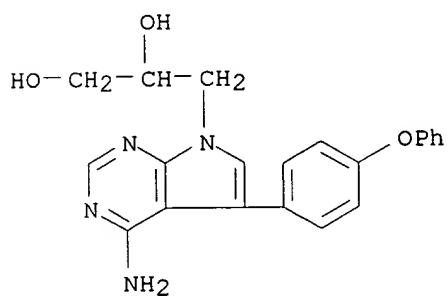
2-[4-amino-5-(4-phenoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



RN 213743-88-5 CAPLUS

CN 1,2-Propanediol,

3-[4-amino-5-(4-phenoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

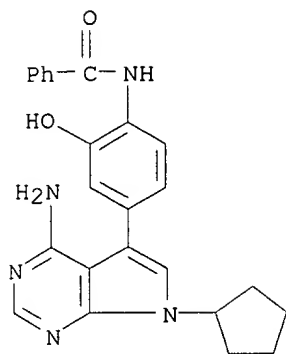


RN 213743-92-1 CAPLUS

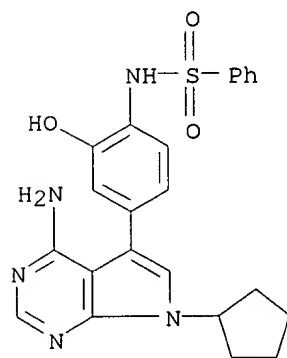
CN Benzamide,

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

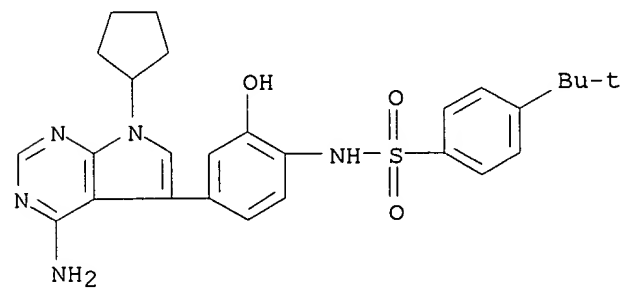
09/399,083



RN 213743-96-5 CAPLUS
CN Benzenesulfonamide,
N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-
5-yl)-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

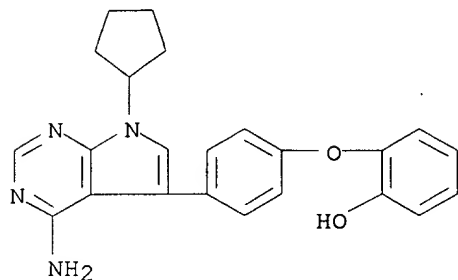


RN 213743-98-7 CAPLUS
CN Benzenesulfonamide,
N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-
5-yl)-2-hydroxyphenyl]-4-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 213744-02-6 CAPLUS

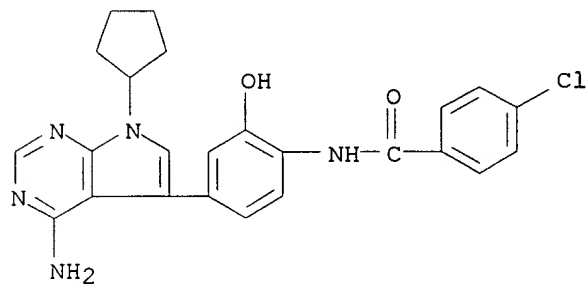
CN Phenol, 2-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)phenoxy]- (9CI) (CA INDEX NAME)



RN 213744-04-8 CAPLUS

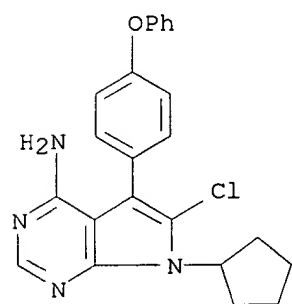
CN Benzamide,

N-[4-(4-amino-7-cyclopentyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-hydroxyphenyl]-4-chloro- (9CI) (CA INDEX NAME)



RN 213744-06-0 CAPLUS

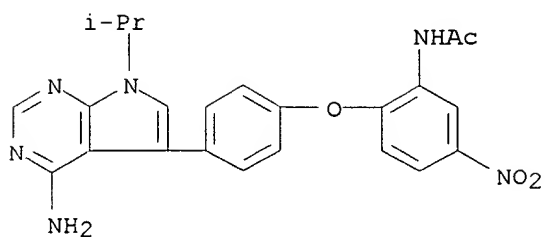
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 6-chloro-7-cyclopentyl-5-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



RN 213744-12-8 CAPLUS

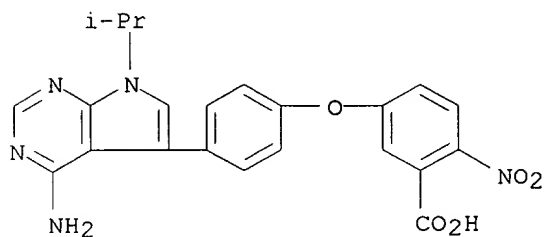
CN Acetamide,

N-[2-[4-[4-amino-7-(1-methylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]-5-nitrophenyl]- (9CI) (CA INDEX NAME)



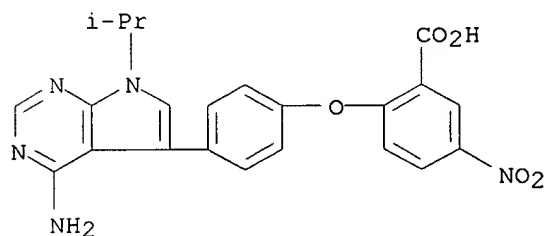
RN 213744-14-0 CAPLUS

CN Benzoic acid,
5-[4-[4-amino-7-(1-methylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]-2-nitro- (9CI) (CA INDEX NAME)



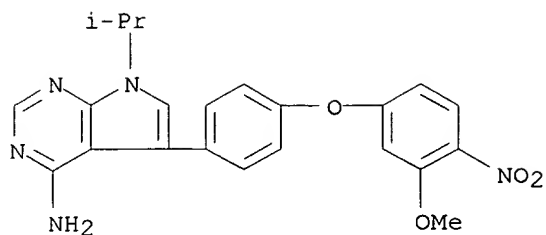
RN 213744-16-2 CAPLUS

CN Benzoic acid,
2-[4-[4-amino-7-(1-methylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]-5-nitro- (9CI) (CA INDEX NAME)



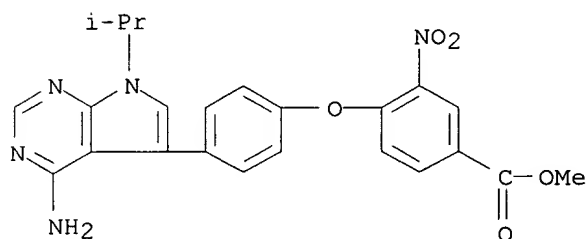
RN 213744-18-4 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
5-[4-(3-methoxy-4-nitrophenoxy)phenyl]-
7-(1-methylethyl)- (9CI) (CA INDEX NAME)



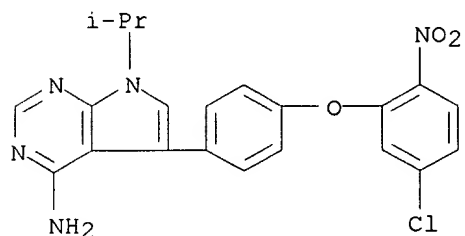
RN 213744-20-8 CAPLUS

CN Benzoic acid,
4-[4-amino-7-(1-methylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]-3-nitro-, methyl ester (9CI) (CA INDEX NAME)



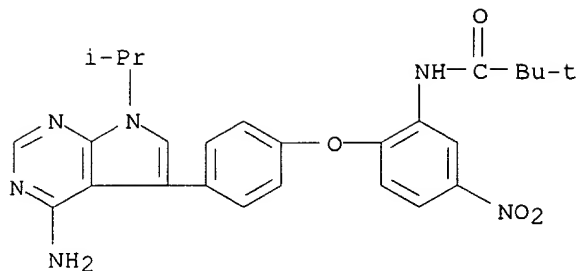
RN 213744-22-0 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
5-[4-(5-chloro-2-nitrophenoxy)phenyl]-
7-(1-methylethyl)- (9CI) (CA INDEX NAME)



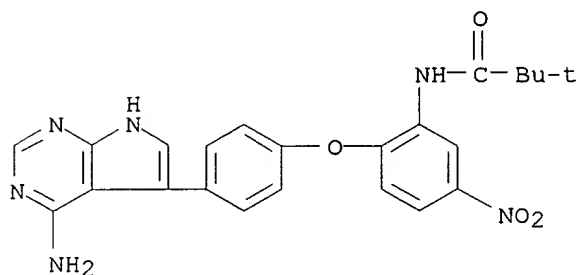
RN 213744-24-2 CAPLUS

CN Propanamide,
N-[2-[4-[4-amino-7-(1-methylethyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]phenoxy]-5-nitrophenyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)



RN 213744-29-7 CAPLUS

CN Propanamide, N-[2-[4-(4-amino-1H-pyrrolo[2,3-d]pyrimidin-5-yl)phenoxy]-5-nitrophenyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

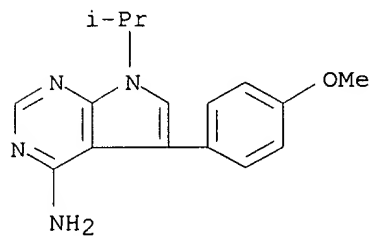


IT 213744-87-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of pyrrolo[2,3-d]pyrimidines as tyrosine kinase inhibitors)

RN 213744-87-7 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
5-(4-methoxyphenyl)-7-(1-methylethyl)-
(9CI) (CA INDEX NAME)



L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2000 ACS

AN 1997:640667 CAPLUS

DN 127:318974

TI Preparation of 7-heterocyclylpyrrolo[2,3-d]pyrimidines and analogs as protein tyrosine kinase pp60c-src inhibitors

IN Altmann, Eva

PA Novartis A.-G., Switz.; Altmann, Eva

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9734895	A1	19970925	WO 1997-EP1095	19970305
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2249739	AA	19970925	CA 1997-2249739	19970305
	AU 9721534	A1	19971010	AU 1997-21534	19970305
	EP 888353	A1	19990107	EP 1997-914189	19970305
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FI

CN 1216544	A	19990512	CN 1997-193839	19970305
BR 9709443	A	19990810	BR 1997-9443	19970305
NO 9804199	A	19981105	NO 1998-4199	19980911

PRAI CH 1996-694	19960315
WO 1997-EP1095	19970305

OS MARPAT 127:318974

AB Title compds. [I; R = R5Z(CH2)0-4; R1 = aryl; R2,R3 = H, halo, alkyl; R5 =

H, alkyl, alkanoyl, alkoxy carbonyl, etc.; Z = (un)substituted pyrrolidine-1,2- or 1,3-diyl, -piperidine-1,2-, -1,3-, or -1,4-diyl] were prepd. as protein tyrosine kinase pp60c-src inhibitors (no data). Thus, PhCOCH2NHAc was cyclocondensed with CH2(CN)2 and the product condensed with HC(OEt)3 and NH3 to give N-(3-cyano-4-phenyl-2-pyrrolyl)formamidine which was cyclized to give, after deprotection, I (R1 = Ph, R2 = R3 = H) (II; R = H) which was condensed with Me

(2R,4R)-1-tert-butoxycarbonyl-4-tosyloxypyrrolidine-2-carboxylate to give, after deprotection, II [R = (2R,4S)-2-ethoxycarbonyl-4-pyrrolidinyl].

IT 197525-41-0P 197525-42-1P 197525-44-3P
197525-45-4P 197525-49-8P 197525-50-1P
197525-53-4P 197525-54-5P 197525-55-6P
197525-56-7P 197525-57-8P

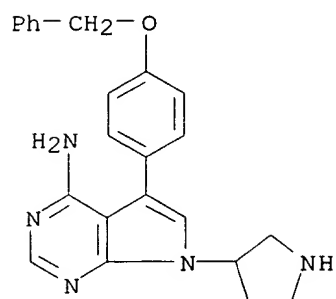
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 7-heterocyclylpyrrolo[2,3-d]pyrimidines and analogs as protein tyrosine kinase pp60c-src inhibitors)

RN 197525-41-0 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[4-(phenylmethoxy)phenyl]-7-(3-

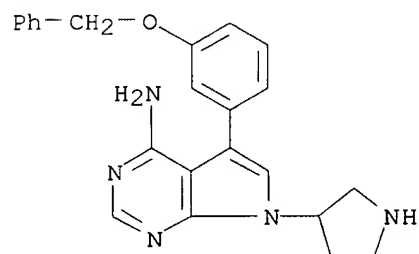
pyrrolidinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 197525-42-1 CAPLUS

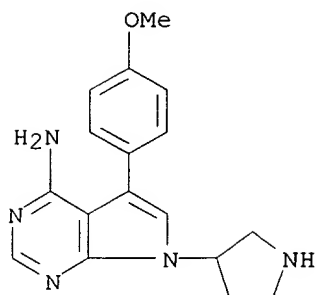
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[3-(benzyloxy)phenyl]-7-(3-pyrrolidinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 197525-44-3 CAPLUS

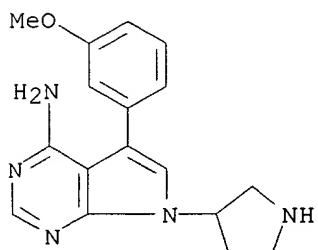
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
5-(4-methoxyphenyl)-7-(3-pyrrolidinyl)-,
dihydrochloride (9CI) (CA INDEX NAME)



8

● 2 HCl

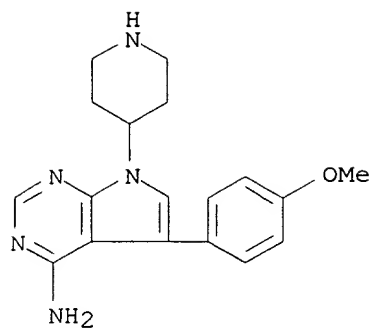
RN 197525-45-4 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 5-(3-methoxyphenyl)-7-(3-pyrrolidinyl)-
 , dihydrochloride (9CI) (CA INDEX NAME)



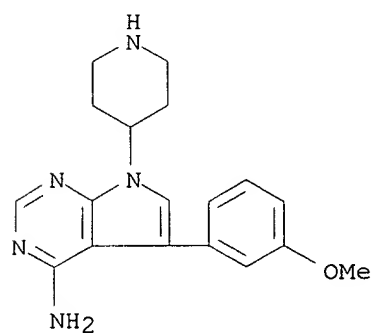
7

● 2 HCl

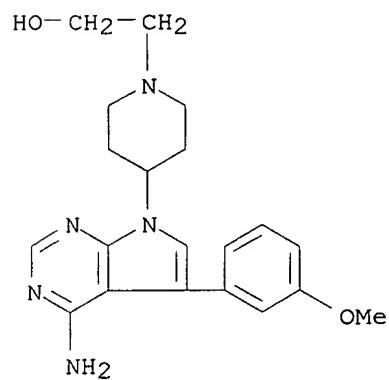
RN 197525-49-8 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 5-(4-methoxyphenyl)-7-(4-piperidinyl)-
 (9CI) (CA INDEX NAME)



RN 197525-50-1 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 5-(3-methoxyphenyl)-7-(4-piperidinyl)-
 (9CI) (CA INDEX NAME)

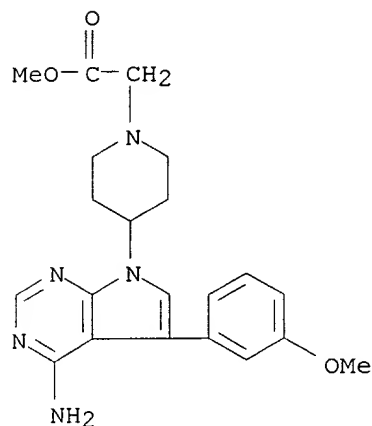


RN 197525-53-4 CAPLUS
 CN 1-Piperidineethanol, 4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-
 d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



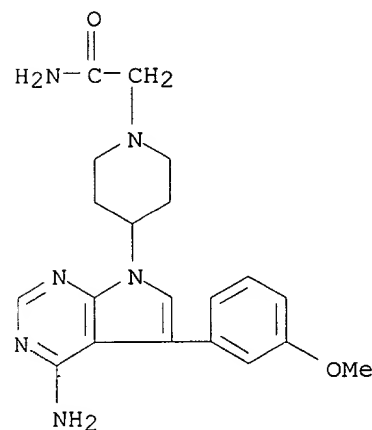
RN 197525-54-5 CAPLUS

CN 1-Piperidineacetic acid, 4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-, methyl ester (9CI) (CA INDEX NAME)



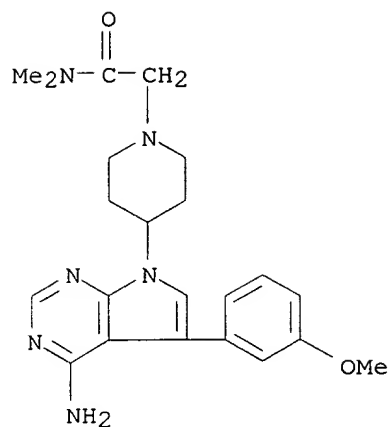
RN 197525-55-6 CAPLUS

CN 1-Piperidineacetamide, 4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



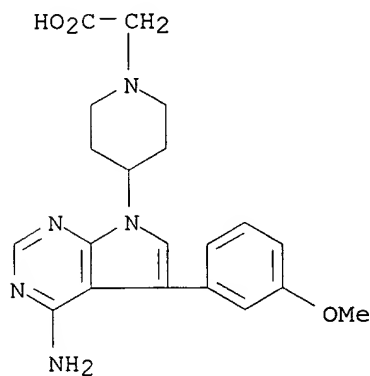
RN 197525-56-7 CAPLUS

CN 1-Piperidineacetamide, 4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 197525-57-8 CAPLUS

CN 1-Piperidineacetic acid, 4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

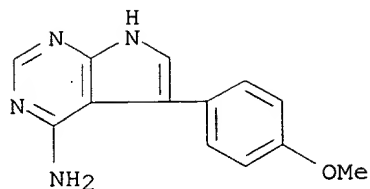


IT 121405-37-6P 194787-34-3P 194787-35-4P
 194787-36-5P 197525-66-9P 197525-67-0P
 197525-68-1P 197525-83-0P 197525-84-1P
 197525-86-3P 197525-87-4P

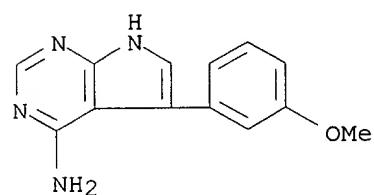
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of 7-heterocyclylpyrrolo[2,3-d]pyrimidines and analogs as
 protein tyrosine kinase pp60c-src inhibitors)

RN 121405-37-6 CAPLUS

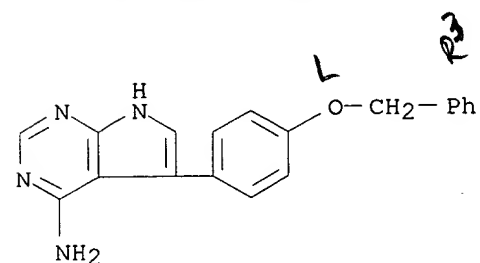
CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



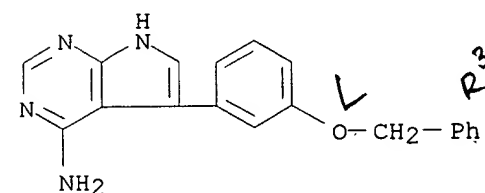
RN 194787-34-3 CAPLUS
 CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 194787-35-4 CAPLUS
 CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[4-(phenylmethoxy)phenyl]- (9CI)
 (CA INDEX NAME)

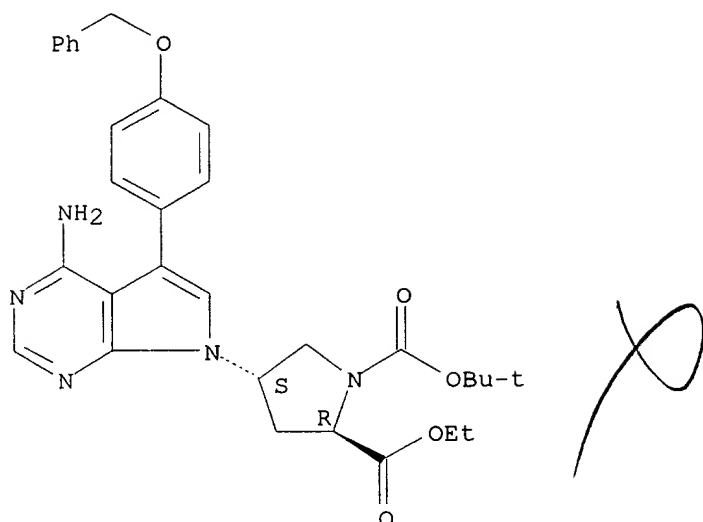


RN 194787-36-5 CAPLUS
 CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[3-(phenylmethoxy)phenyl]- (9CI)
 (CA INDEX NAME)



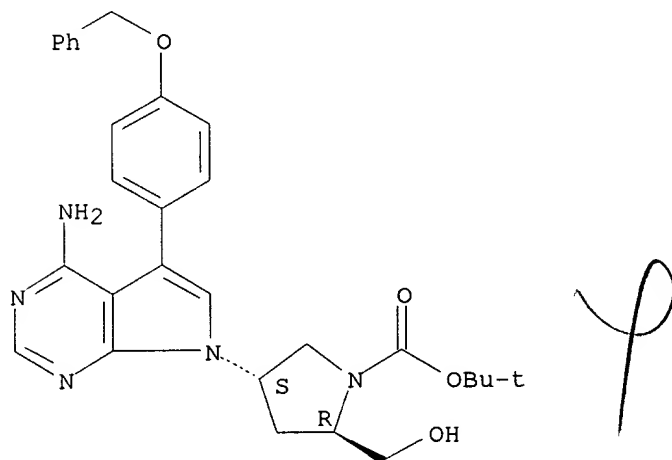
RN 197525-66-9 CAPLUS
 CN 1,2-Pyrrolidinedicarboxylic acid, 4-[4-amino-5-[4-(phenylmethoxy)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-, 1-(1,1-dimethylethyl) 2-ethyl ester, (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



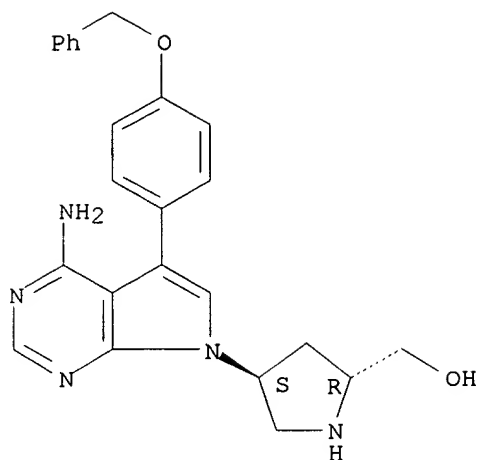
RN 197525-67-0 CAPLUS
 CN 1-Pyrrolidinecarboxylic acid, 4-[4-amino-5-[4-(phenylmethoxy)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-2-(hydroxymethyl)-, 1,1-dimethylethyl ester,
 (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



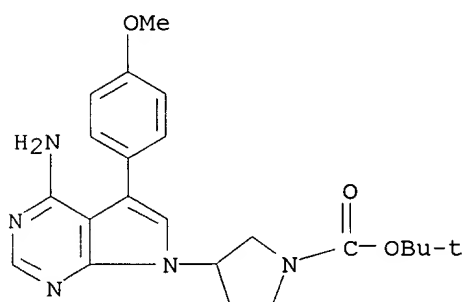
RN 197525-68-1 CAPLUS
 CN 2-Pyrrolidinemethanol, 4-[4-amino-5-[4-(phenylmethoxy)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-, (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



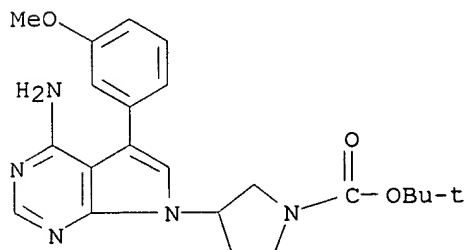
RN 197525-83-0 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 3-[4-amino-5-(4-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 197525-84-1 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 3-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

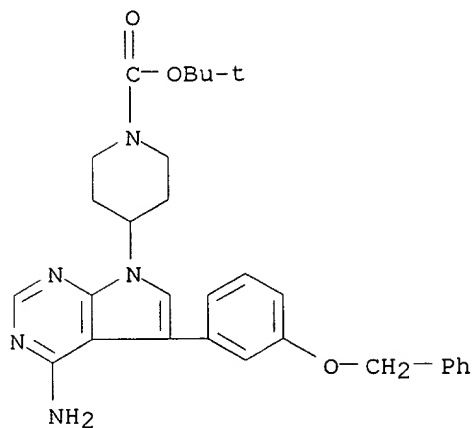


RN 197525-86-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[4-amino-5-[3-(phenylmethoxy)phenyl]-7H-

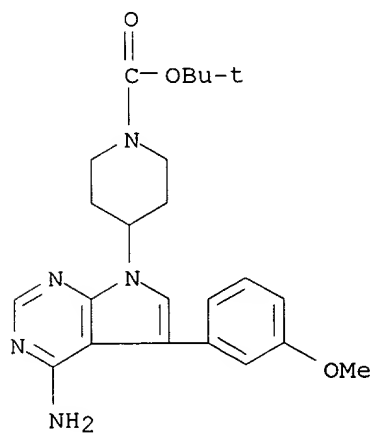
09/399,083

pyrrolo[2,3-d]pyrimidin-7-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



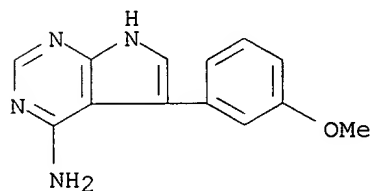
RN 197525-87-4 CAPLUS

CN 1-Piperidinecarboxylic acid,
4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-
d]pyrimidin-7-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

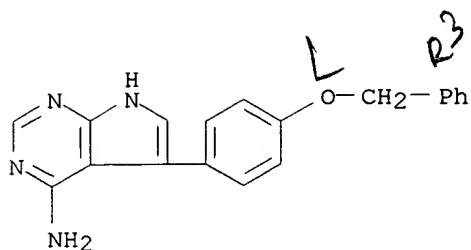


L6 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2000 ACS
 AN 1997:618099 CAPLUS
 DN 127:293238
 TI 7-Alkylpyrrolo[2,3-d]pyrimidines
 IN Altmann, Eva; Missbach, Martin; Widler, Leo
 PA Novartis A.-G., Switz.; Altmann, Eva; Missbach, Martin; Widler, Leo
 SO PCT Int. Appl., 64 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9732879	A1	19970912	WO 1997-EP874	19970224
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9717946	A1	19970922	AU 1997-17946	19970224
PRAI	EP 1996-810137		19960306		
	WO 1997-EP874		19970224		
OS	MARPAT 127:293238				
AB	Approx. 50 protein tyrosine kinase inhibiting title compds. I [R = H, alkyl, hydroxyalkyl, hydroxy(aryl)alkyl, hydroxycycloalkyl, hydroxycycloalkylalkyl, chloroalkyl, substituted-aminoalkyl, etc.; R1 = Ph, substituted-phenyl] were prepd. E.g., I (R = H, R1 = Ph) was prepd. from phenacylamine-HCl and Ac2O in 4 steps via 2-amino-4-phenyl-1H-pyrrole-3-carbonitrile and N-(3-cyano-4-phenyl-1H-pyrrol-2-yl)formamidine.				
IT	194787-34-3P 194787-35-4P 196964-56-4P 196964-57-5P				
	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of protein tyrosine kinase inhibiting pyrrolopyrimidines)				
RN	194787-34-3 CAPLUS				
CN	1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)				

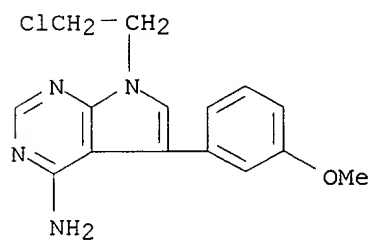


RN 194787-35-4 CAPLUS
 CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

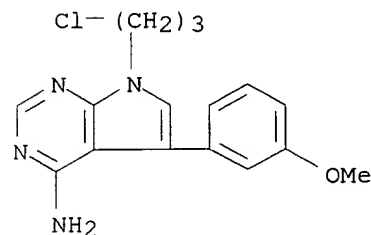


Protein kinase 1 not zero.

RN 196964-56-4 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 7-(2-chloroethyl)-5-(3-methoxyphenyl)-
 (9CI) (CA INDEX NAME)



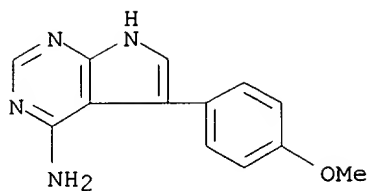
RN 196964-57-5 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 7-(3-chloropropyl)-5-(3-methoxyphenyl)-
 (9CI) (CA INDEX NAME)



IT 121405-37-6P 194787-36-5P 196963-91-4P
 196964-10-0P 196964-14-4P 196964-19-9P
 196964-28-0P 196964-29-1P 196964-30-4P
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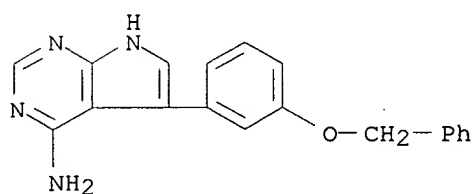
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of protein tyrosine kinase inhibiting pyrrolopyrimidines)

RN 121405-37-6 CAPLUS
 CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



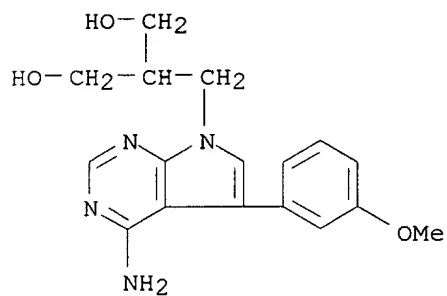
RN 194787-36-5 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[3-(phenylmethoxy)phenyl]- (9CI)
(CA INDEX NAME)



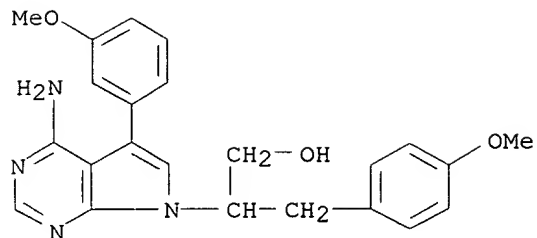
RN 196963-91-4 CAPLUS

CN 1,3-Propanediol, 2-[[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]methyl]- (9CI) (CA INDEX NAME)



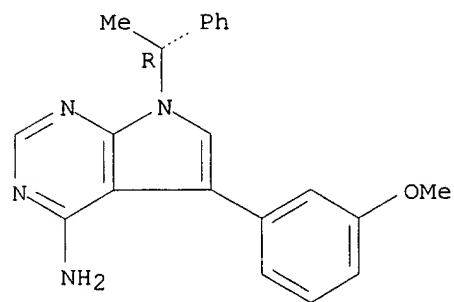
RN 196964-10-0 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidine-7-ethanol,
4-amino-5-(3-methoxyphenyl)-.beta.-
[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

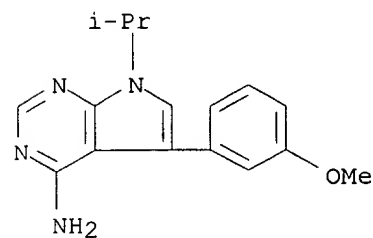


RN 196964-14-4 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 5-(3-methoxyphenyl)-7-(1-phenylethyl)-
 , (R)- (9CI) (CA INDEX NAME)

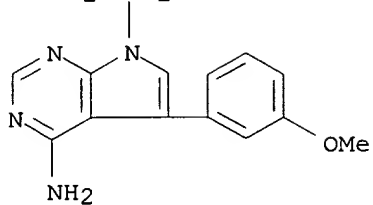
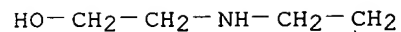
Absolute stereochemistry.



RN 196964-19-9 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 5-(3-methoxyphenyl)-7-(1-methylethyl)-
 (9CI) (CA INDEX NAME)



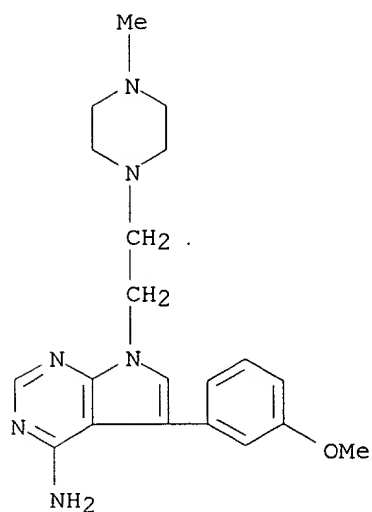
RN 196964-28-0 CAPLUS
 CN Ethanol, 2-[[2-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]ethyl]amino]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

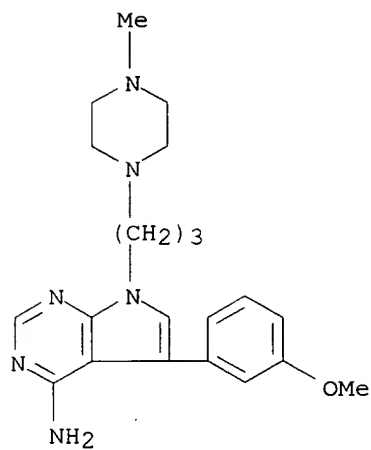
RN 196964-29-1 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(3-methoxyphenyl)-7-[2-(4-methyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

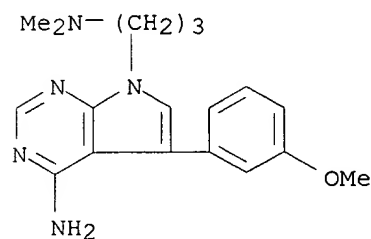


RN 196964-30-4 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(3-methoxyphenyl)-7-[3-(4-methyl-1-piperazinyl)propyl]- (9CI) (CA INDEX NAME)

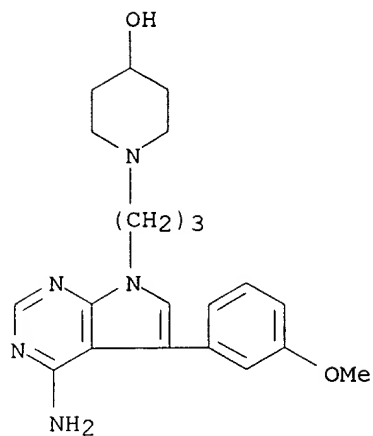


RN 196964-31-5 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidine-7-propanamine,
 4-amino-5-(3-methoxyphenyl)-N,N-
 dimethyl- (9CI) (CA INDEX NAME)



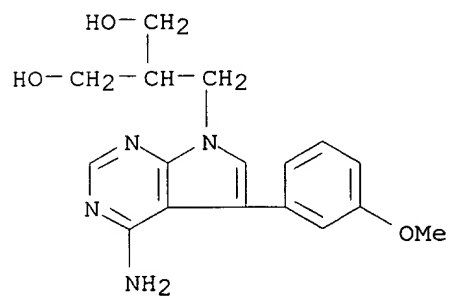
RN 196964-32-6 CAPLUS
 CN 4-Piperidinol, 1-[3-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-
 d]pyrimidin-7-yl]propyl]- (9CI) (CA INDEX NAME)

09/399,083



RN 196964-64-4 CAPLUS

CN 1,3-Propanediol, 2-[[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]methyl]-, monohydrochloride (9Cl) (CA INDEX NAME)



● HCl

L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2000 ACS

AN 1997:533648 CAPLUS

DN 127:220666

TI Preparation of 4-aminopyrrolo[2,3-d]pyrimidines as tyrosine kinase inhibitors

IN Altmann, Eva; Widler, Leo; Missbach, Martin

PA Novartis A.-G, Switz.; Altmann, Eva; Widler, Leo; Missbach, Martin

SO PCT Int. Appl., 48 pp.

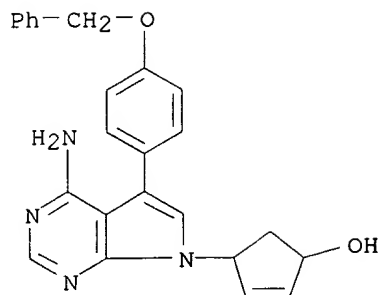
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

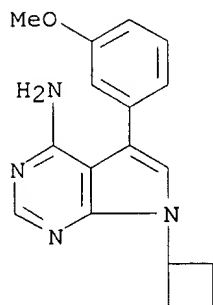
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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TM	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9715951	A1	19970822	AU 1997-15951	19970127
PRAI	CH 1996-257		19960201		
	WO 1997-EP350		19970127		
OS	MARPAT 127:220666				
AB	Title compds. [I; R1 = aryl; R2,R4 = H, halo, alkyl; R3 = (un)substituted cycloalk(en)yl] were prep'd. as tyrosine kinase inhibitors (no data). Thus, PhCOCH ₂ NH ₂ was N-acetylated and the product cyclocondensed with CH ₂ (CN) ₂ to give 2-amino-3-cyano-4-phenylpyrrole which was condensed with HC(OEt) ₃ and NH ₃ and the product cyclized to give I (R1 = Ph, R2 = R4 = H) (II; R3 = H). The latter was condensed with cyclopentadiene monoepoxide to give II (R3 = 3-hydroxy-2-cyclopentenyl).				
IT	194787-38-7P 194787-74-1P 194787-80-9P 194787-83-2P 194787-84-3P 194787-86-5P 194787-87-6P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of 4-aminopyrrolo[2,3-d]pyrimidines as tyrosine kinase inhibitors)				
RN	194787-38-7 CAPLUS				
CN	2-Cyclopenten-1-ol, 4-[4-amino-5-[4-(phenylmethoxy)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)				



Quercetin

RN 194787-74-1 CAPLUS

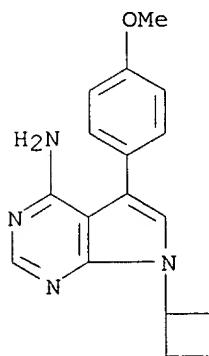
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(3-methoxyphenyl)-
(9CI) (CA INDEX NAME)



X

RN 194787-80-9 CAPLUS

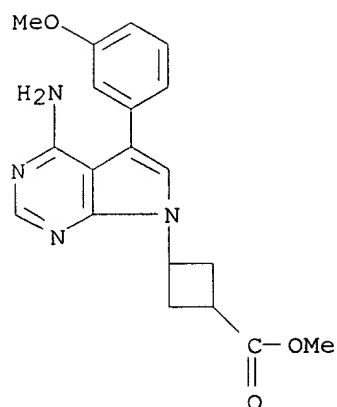
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(4-methoxyphenyl)-
(9CI) (CA INDEX NAME)



X

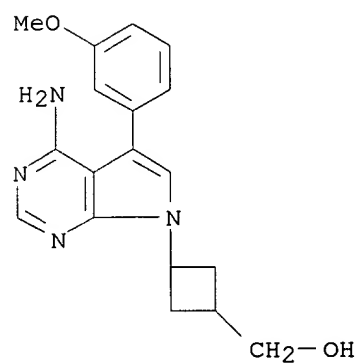
RN 194787-83-2 CAPLUS

CN Cyclobutanecarboxylic acid,
3-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-
d]pyrimidin-7-yl]-, methyl ester (9CI) (CA INDEX NAME)



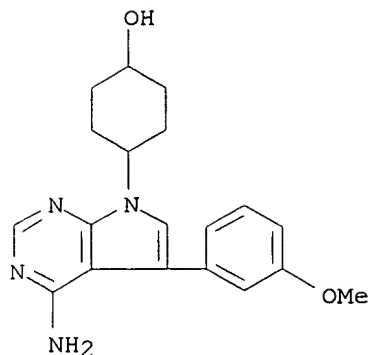
7

RN 194787-84-3 CAPLUS
 CN Cyclobutanemethanol, 3-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



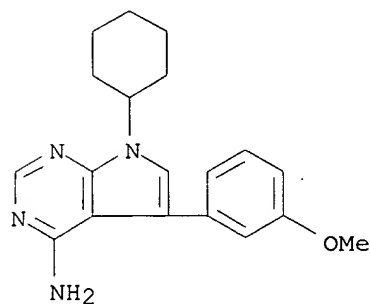
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RN 194787-86-5 CAPLUS
 CN Cyclohexanol, 4-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



8

RN 194787-87-6 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-cyclohexyl-5-(3-methoxyphenyl)-
 (9CI) (CA INDEX NAME)

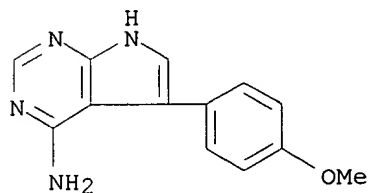


9

IT 121405-37-6P 194787-34-3P 194787-35-4P
 194787-36-5P 194788-04-0P 194788-05-1P
 194788-06-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of 4-aminopyrrolo[2,3-d]pyrimidines as tyrosine kinase
 inhibitors)

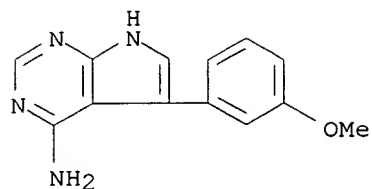
RN 121405-37-6 CAPLUS
 CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-methoxyphenyl)- (9CI) (CA INDEX
 NAME)



10

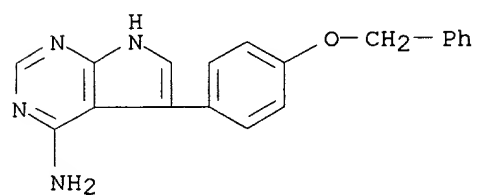
RN 194787-34-3 CAPLUS
 CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(3-methoxyphenyl)- (9CI) (CA INDEX

NAME)



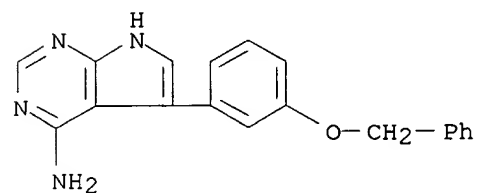
8

RN 194787-35-4 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[4-(phenylmethoxy)phenyl]- (9CI)
(CA INDEX NAME)

Grovino

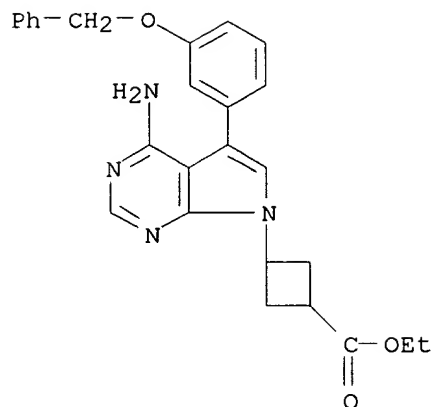
RN 194787-36-5 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[3-(phenylmethoxy)phenyl]- (9CI)
(CA INDEX NAME)

1

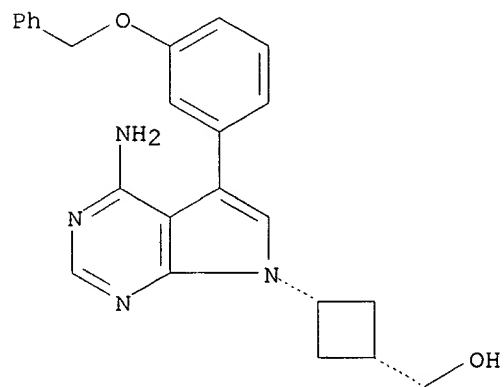
RN 194788-04-0 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[4-amino-5-[3-(phenylmethoxy)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 194788-05-1 CAPLUS
 CN Cyclobutanemethanol,
 3-[4-amino-5-[3-(phenylmethoxy)phenyl]-7H-pyrrolo[2,3-
 d]pyrimidin-7-yl]-, cis- (9CI) (CA INDEX NAME)

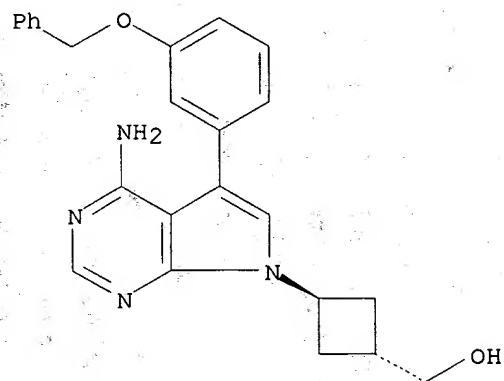
Relative stereochemistry.



RN 194788-06-2 CAPLUS
 CN Cyclobutanemethanol,
 3-[4-amino-5-[3-(phenylmethoxy)phenyl]-7H-pyrrolo[2,3-
 d]pyrimidin-7-yl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

09/399,083



L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2000 ACS

AN 1997:411066 CAPLUS

DN 127:90501

TI 4-aminopyrrolo[2,3-d]pyrimidines as tyrosine kinase inhibitors

IN Dow, Robert L.; Koch, Kevin

PA Pfizer Inc., USA

SO U.S., 5 pp.

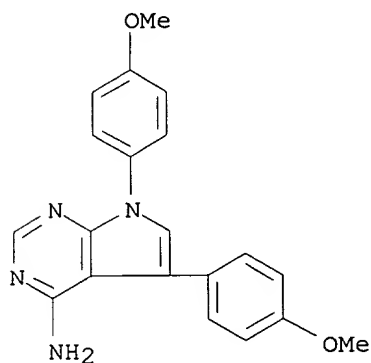
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

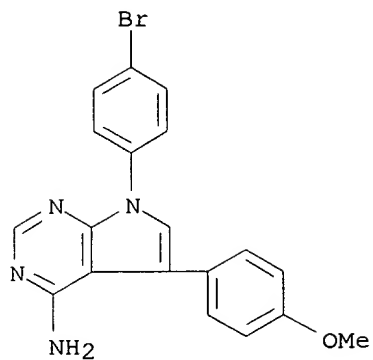
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5639757	A	19970617	US 1995-448248	19950523
OS	MARPAT 127:90501				
AB	Certain 4-aminopyrrolo[2,3-d]pyrimidine compds., and their pharmaceutically-acceptable salts (Markush structure given), are inhibitors of tyrosine kinase enzymes, and are useful for immunoregulation and for the treatment of cancer, angiogenesis and atherosclerosis. Inhibitory activity of 15 title compds. at 1×10^{-4} - 10^{-6} M concn. was tested on enzyme pp60src, a tyrosine-specific phosphokinase assocd. with the inner surface of the plasma membrane.				
IT	121405-31-0 121405-32-1 121405-33-2 RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aminopyrrolopyrimidines as tyrosine kinase inhibitors)				
RN	121405-31-0 CAPLUS				
CN	7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5,7-bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)				



RN 121405-32-1 CAPLUS

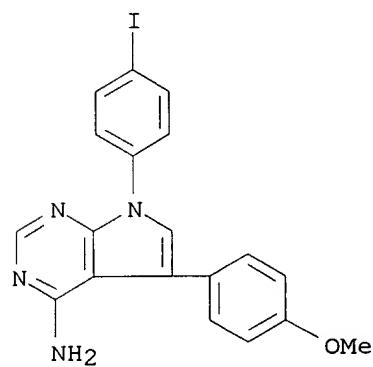
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 7-(4-bromophenyl)-5-(4-methoxyphenyl)-
 (9CI) (CA INDEX NAME)

09/399,083



Y

RN 121405-33-2 CAPLUS
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(4-iodophenyl)-5-(4-methoxyphenyl)-
(9CI) (CA INDEX NAME)



Y

L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2000 ACS

AN 1996:443907 CAPLUS

DN 125:86670

TI Preparation of 4-aminopyrrolo[2,3-d]pyrimidines as inhibitors of the protein tyrosine kinase pp60c-src

IN Missbach, Martin

PA Ciba-Geigy A.-G., Switz.

SO PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9610028	A1	19960404	WO 1995-EP3536	19950908
	W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2200210	AA	19960404	CA 1995-2200210	19950908
	AU 9535643	A1	19960419	AU 1995-35643	19950908
	AU 694801	B2	19980730		
	EP 783505	A1	19970716	EP 1995-932693	19950908
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,				

SE

CN 1164234	A	19971105	CN 1995-196308	19950908
CN 1046731	B	19991124		
HU 76785	A2	19971128	HU 1997-1333	19950908
BR 9509048	A	19980106	BR 1995-9048	19950908
JP 10506624	T2	19980630	JP 1995-511312	19950908
US 5869485	A	19990209	US 1997-793313	19970319
NO 9701342	A	19970321	NO 1997-1342	19970321
FI 9701225	A	19970514	FI 1997-1225	19970324

PRAI CH 1994-2953 19940929

WO 1995-EP3536 19950908

OS CASREACT 125:86670; MARPAT 125:86670

AB The title compds. [I; R1, R3 = (substituted) aryl; R2 = H, alkyl, halo], useful for the treatment of osteoporosis, breast cancer and

cardiovascular

disorders, e.g. thrombosis, were prepd. by e.g. treatment of substituted 2-amino-3-cyano-pyrrole with (EtO)3CH followed by treatment of II (X = EtO) with NH3/EtOH and cyclization of II (X = NH2) with NH3/EtOH at 130.degree. in an autoclave. Tablets formulations contg. I are given.

In

general, compds. I showed IC50 of 0.001-10 .mu.M against protein tyrosine kinase pp60c-src.

IT 178909-50-7P

RL: BAC (Biological activity or effector, except adverse); RCT

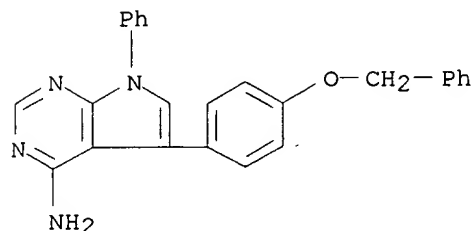
(Reactant);

SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 4-aminopyrrolo[2,3-d]pyrimidines as inhibitors of the protein tyrosine kinase pp60c-src)

RN 178909-50-7 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-phenyl-5-[4-(phenylmethoxy)phenyl]-
(9CI) (CA INDEX NAME)



2

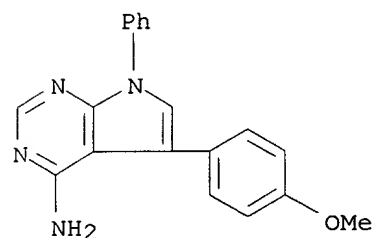
IT 121405-30-9P 178909-27-8P 178909-32-5P
178909-42-7P 178909-46-1P 178909-47-2P
178909-49-4P 178909-66-5P 178909-84-7P
178909-97-2P 178909-98-3P 178910-00-4P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 4-aminopyrrolo[2,3-d]pyrimidines as inhibitors of the protein tyrosine kinase pp60c-src)

RN 121405-30-9 CAPLUS

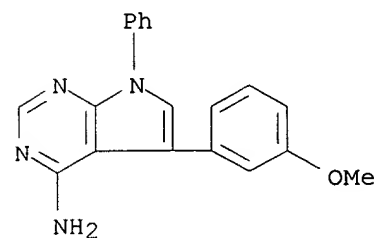
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-methoxyphenyl)-7-phenyl- (9CI)
(CA INDEX NAME)



3

RN 178909-27-8 CAPLUS

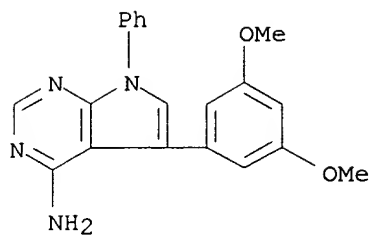
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(3-methoxyphenyl)-7-phenyl- (9CI)
(CA INDEX NAME)



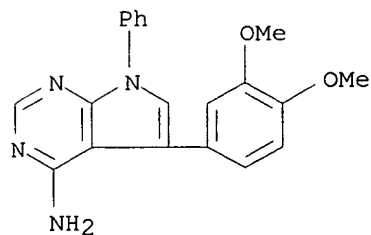
4

RN 178909-32-5 CAPLUS

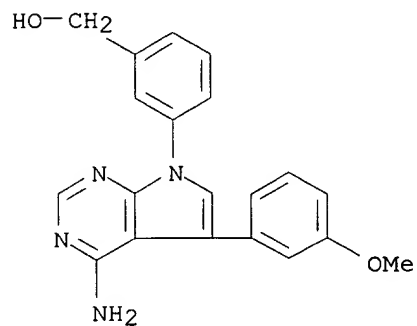
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(3,5-dimethoxyphenyl)-7-phenyl-
(9CI) (CA INDEX NAME)



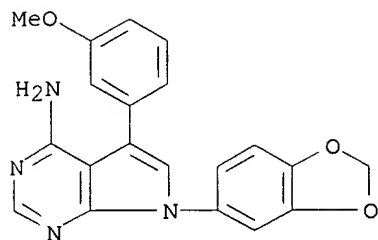
RN 178909-42-7 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(3,4-dimethoxyphenyl)-7-phenyl-
 (9CI) (CA INDEX NAME)



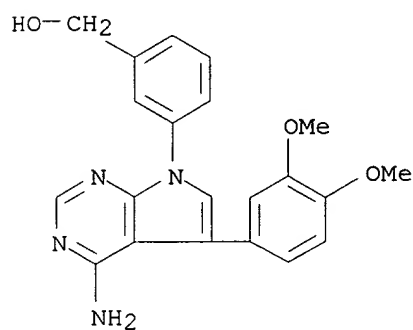
RN 178909-46-1 CAPLUS
 CN Benzenemethanol,
 3-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-
 7-yl]- (9CI) (CA INDEX NAME)



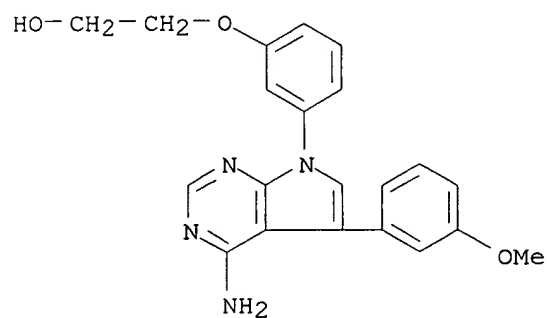
RN 178909-47-2 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(1,3-benzodioxol-5-yl)-5-(3-
 methoxyphenyl)- (9CI) (CA INDEX NAME)



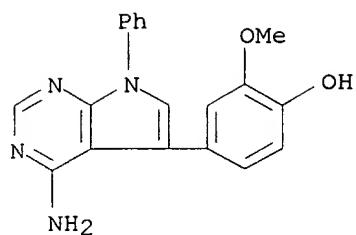
RN 178909-49-4 CAPLUS
 CN Benzenemethanol, 3-[4-amino-5-(3,4-dimethoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)



RN 178909-66-5 CAPLUS
 CN Ethanol, 2-[3-[4-amino-5-(3-methoxyphenyl)-7H-pyrrolo[2,3-d]pyrimidin-7-yl]phenoxy]- (9CI) (CA INDEX NAME)



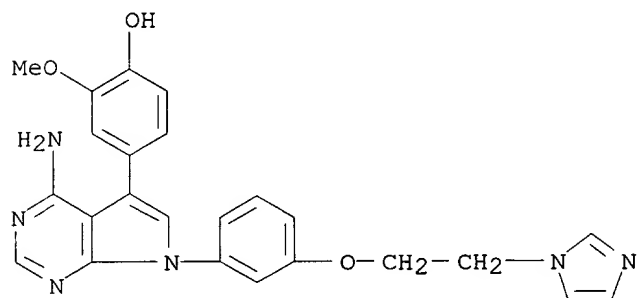
RN 178909-84-7 CAPLUS
 CN Phenol, 4-(4-amino-7-phenyl-7H-pyrrolo[2,3-d]pyrimidin-5-yl)-2-methoxy- (9CI) (CA INDEX NAME)



RN 178909-97-2 CAPLUS

CN Phenol,

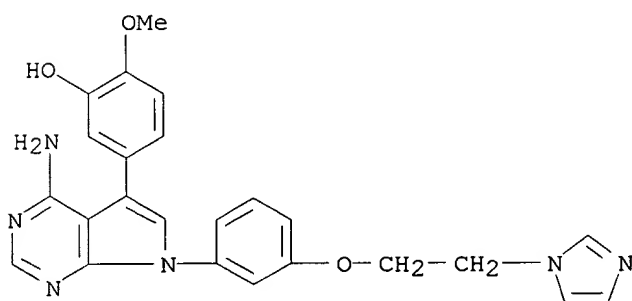
4-[4-amino-7-[3-(2-(1H-imidazol-1-yl)ethoxy)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxy- (9CI) (CA INDEX NAME)



RN 178909-98-3 CAPLUS

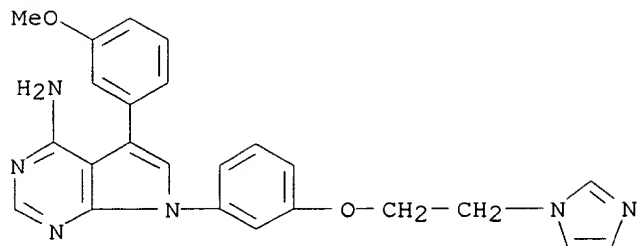
CN Phenol,

5-[4-amino-7-[3-(2-(1H-imidazol-1-yl)ethoxy)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-methoxy- (9CI) (CA INDEX NAME)



RN 178910-00-4 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-5-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

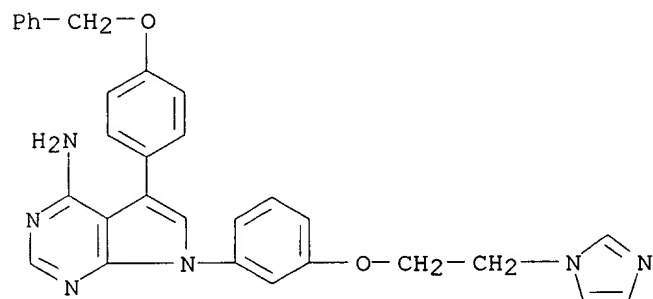


IT 178910-31-1P 178910-37-7P 178910-38-8P
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 178910-42-4P 178910-43-5P 178910-44-6P
 178910-45-7P 178910-46-8P 178910-47-9P
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 178910-51-5P 178910-52-6P 178910-53-7P
 178910-54-8P 178910-55-9P 178910-56-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of 4-aminopyrrolo[2,3-d]pyrimidines as inhibitors of the
 protein tyrosine kinase pp60c-src)

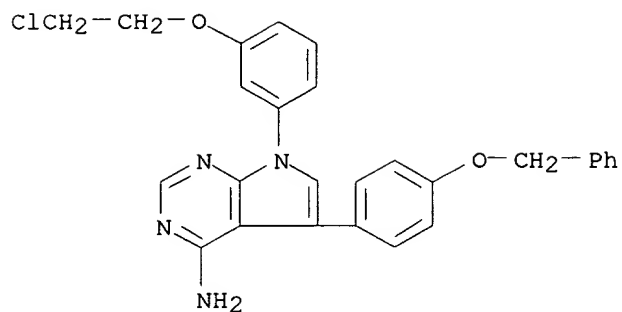
RN 178910-31-1 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-5-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



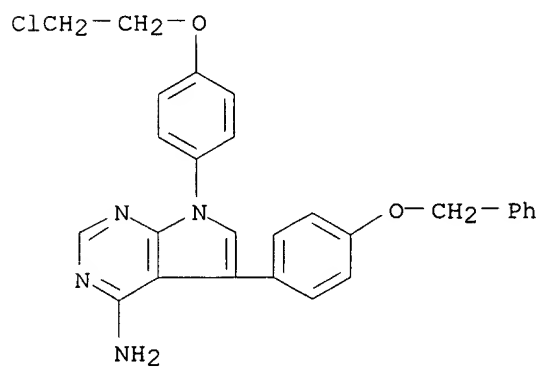
RN 178910-37-7 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-(2-chloroethoxy)phenyl]-5-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



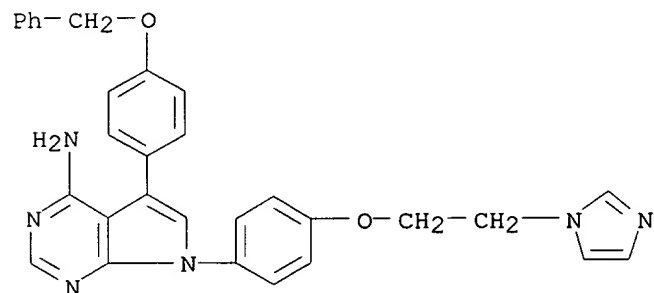
RN 178910-38-8 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[4-(2-chloroethoxy)phenyl]-5-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



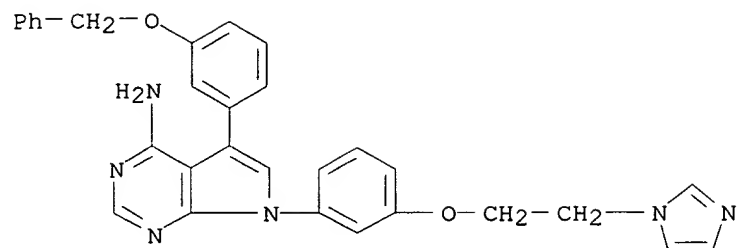
RN 178910-39-9 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[4-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-5-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

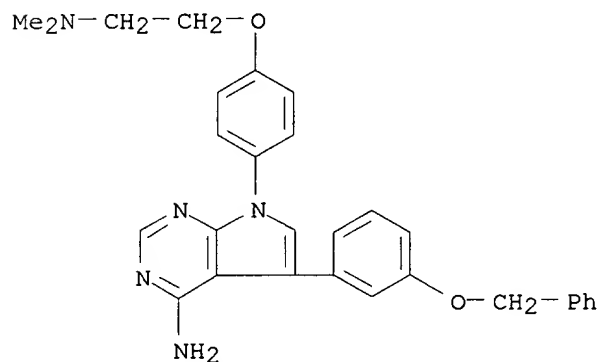


RN 178910-40-2 CAPLUS

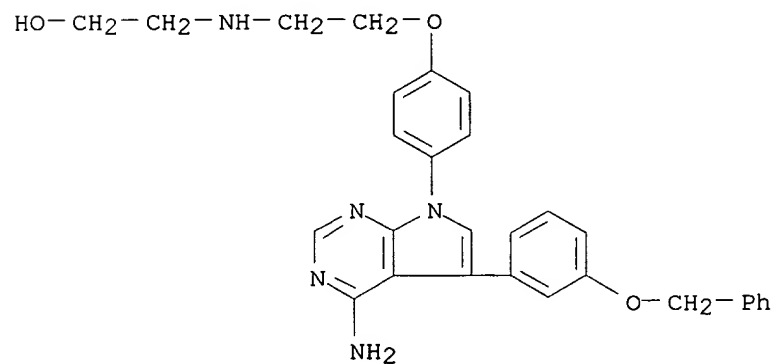
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-5-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



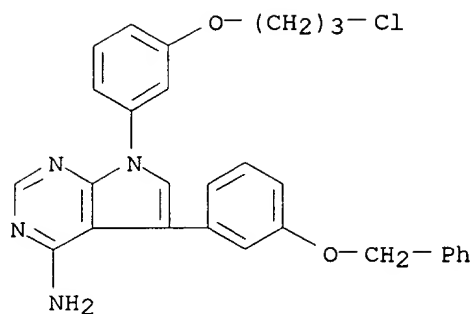
RN 178910-41-3 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 7-[4-[2-(dimethylamino)ethoxy]phenyl]-
 5-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 178910-42-4 CAPLUS
 CN Ethanol, 2-[[2-[4-[4-amino-5-[3-(phenylmethoxy)phenyl]-7H-pyrrolo[2,3-d]pyrimidin-7-yl]phenoxy]ethyl]amino]- (9CI) (CA INDEX NAME)

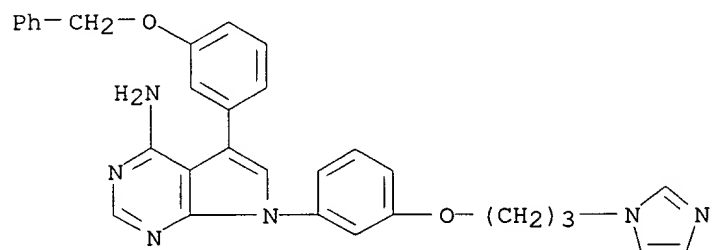


RN 178910-43-5 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-(3-chloropropoxy)phenyl]-5-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



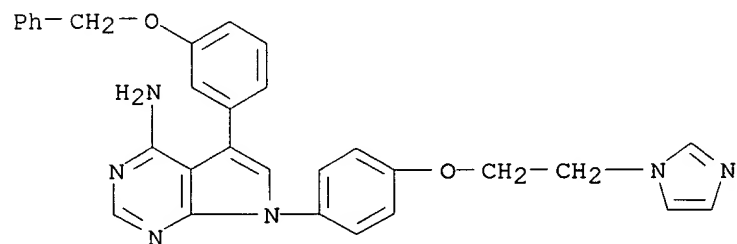
RN 178910-44-6 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-[3-(1H-imidazol-1-yl)propoxy]phenyl]-5-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



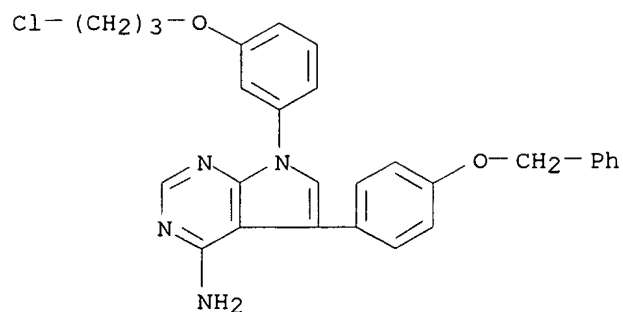
RN 178910-45-7 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[4-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-5-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



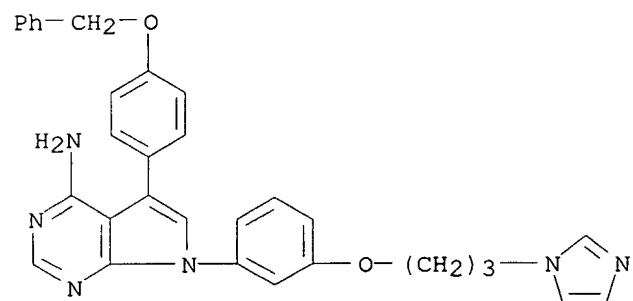
RN 178910-46-8 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-(3-chloropropoxy)phenyl]-5-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



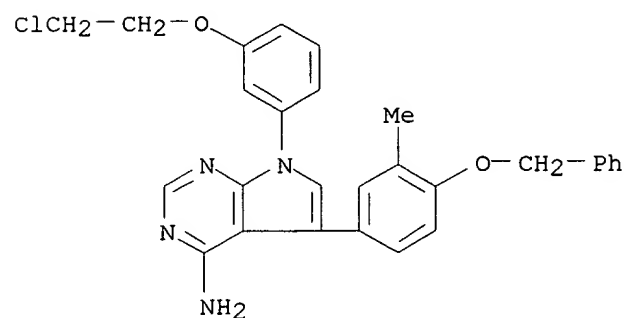
RN 178910-47-9 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-[3-(1H-imidazol-1-yl)propoxy]phenyl]-5-[4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



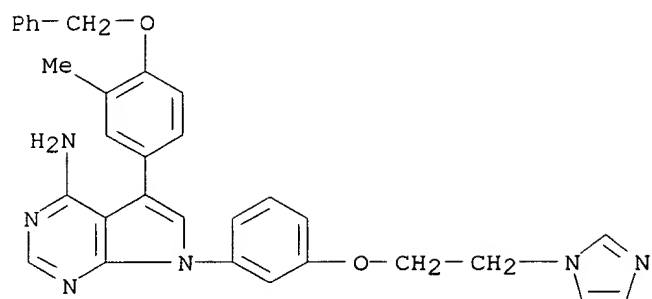
RN 178910-48-0 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-(2-chloroethoxy)phenyl]-5-[3-methyl-4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



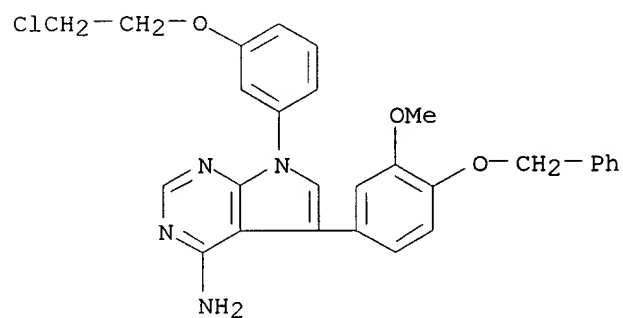
RN 178910-49-1 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-5-[3-methyl-4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



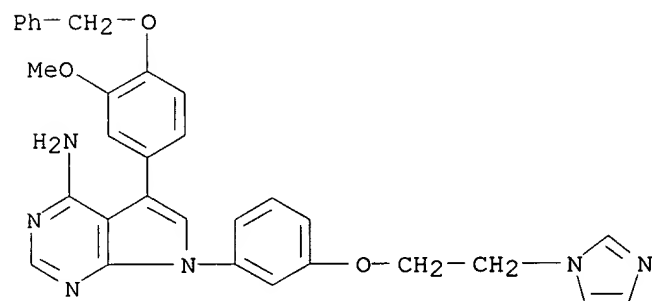
RN 178910-50-4 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-(2-chloroethoxy)phenyl]-5-[3-methoxy-4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



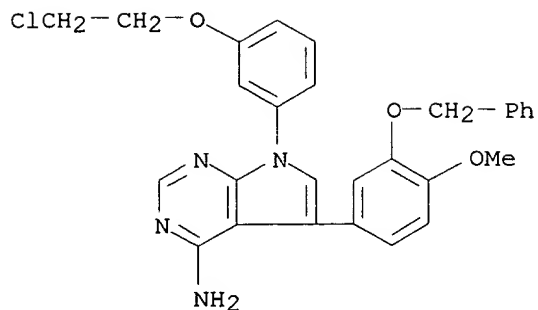
RN 178910-51-5 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-5-[3-methoxy-4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



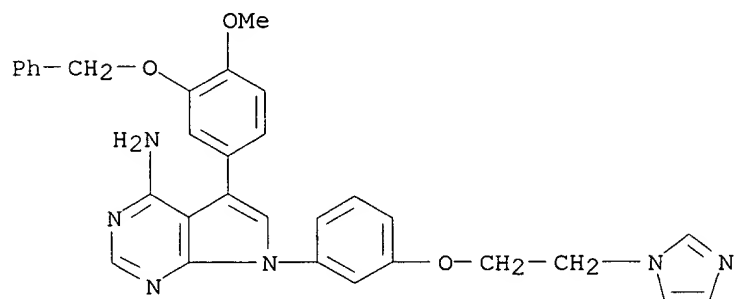
RN 178910-52-6 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-(2-chloroethoxy)phenyl]-5-[4-methoxy-3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



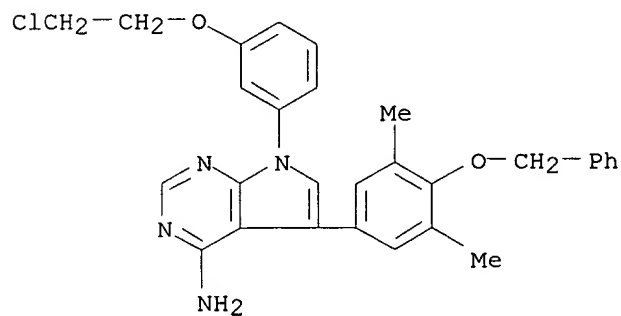
RN 178910-53-7 CAPLUS

CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-5-[4-methoxy-3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 178910-54-8 CAPLUS

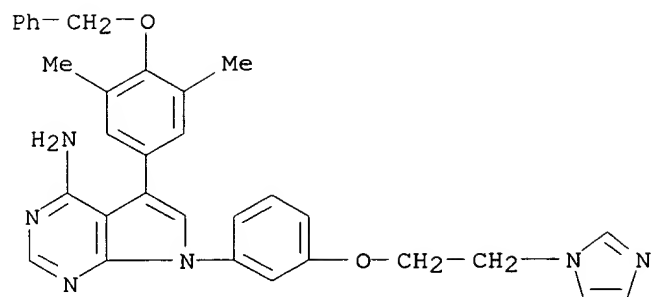
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-(2-chloroethoxy)phenyl]-5-[3,5-dimethyl-4-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 178910-55-9 CAPLUS

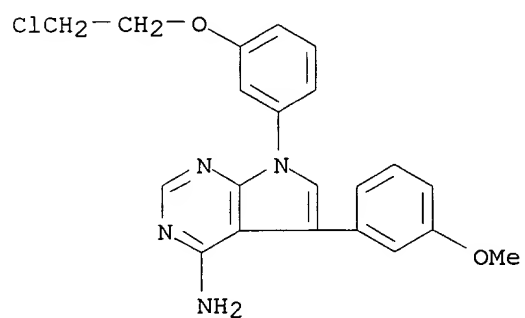
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-[3,5-dimethyl-4-(phenylmethoxy)phenyl]-7-[3-[2-(1H-imidazol-1-yl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

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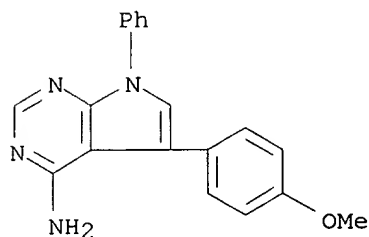


RN 178910-56-0 CAPLUS

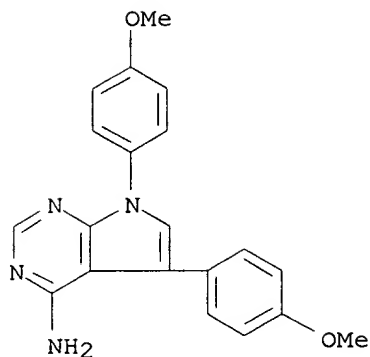
CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-[3-(2-chloroethoxy)phenyl]-5-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



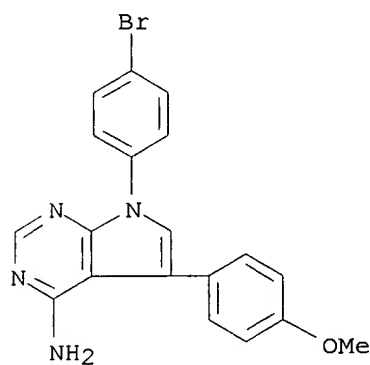
L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2000 ACS
 AN 1989:439290 CAPLUS
 DN 111:39290
 TI Synthesis and biological activity of pyrrolo[2,3-d]pyrimidines
 AU Dave, Chaitanya G.; Shah, P. R.; Upadhyaya, S. P.; Gandhi, T. P.; Patel, R. B.
 CS Dep. Chem., St. Xavier's Coll., Ahmedabad, 380 009, India
 SO Indian J. Chem., Sect. B (1988), 27B(8), 778-80
 CODEN: IJSBDB; ISSN: 0376-4699
 DT Journal
 LA English
 OS CASREACT 111:39290
 AB 2-Amino-3-pyrrololecarbonitriles were treated with HCONH₂ to give aminopyrrolopyrimidines I [R₁ = Ph, tolyl, anisyl, halophenyl; R₂ = H, or R₂R₃ = (CH₂)₄; R₃ = Ph, anisyl, ClC₆H₄, Me, tolyl]. Most I showed bactericidal, analgesic, antiinflammatory, antihistaminic, anticholinergic, anticonvulsant, and antihypertensive activity. Also prepd., from CS₂, were pyrrolopyrimidines II.
 IT **121405-30-9P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and anticholinergic activity of)
 RN 121405-30-9 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-methoxyphenyl)-7-phenyl- (9CI)
 (CA INDEX NAME)



IT **121405-31-0P 121405-32-1P**
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (prepn. and pharmacol. activity of)
 RN 121405-31-0 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5,7-bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

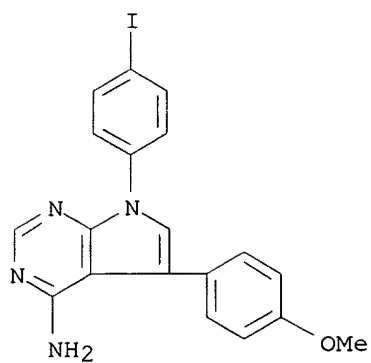


RN 121405-32-1 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine,
 7-(4-bromophenyl)-5-(4-methoxyphenyl)-
 (9CI) (CA INDEX NAME)



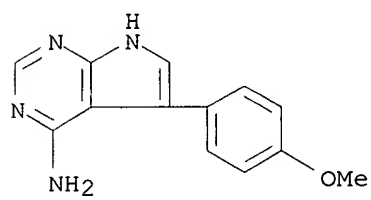
IT **121405-33-2P 121405-37-6P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 121405-33-2 CAPLUS
 CN 7H-Pyrrolo[2,3-d]pyrimidin-4-amine, 7-(4-iodophenyl)-5-(4-methoxyphenyl)-
 (9CI) (CA INDEX NAME)

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RN 121405-37-6 CAPLUS

CN 1H-Pyrrolo[2,3-d]pyrimidin-4-amine, 5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



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=> d his

(FILE 'HOME' ENTERED AT 16:50:35 ON 06 MAR 2000)

FILE 'REGISTRY' ENTERED AT 16:50:52 ON 06 MAR 2000
L1 STRUCTURE UPLOADED
L2 21 S L1 SSS SAM

FILE 'STNGUIDE' ENTERED AT 16:52:10 ON 06 MAR 2000

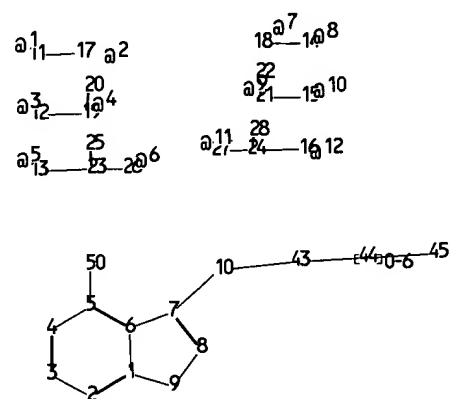
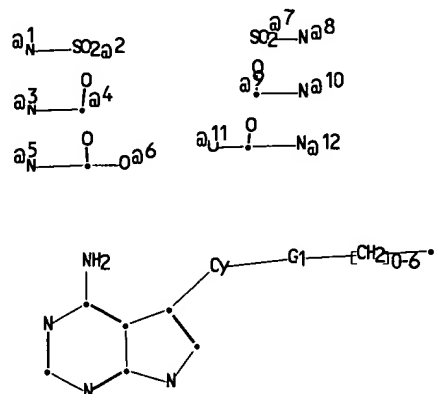
FILE 'REGISTRY' ENTERED AT 17:00:44 ON 06 MAR 2000
L3 STRUCTURE UPLOADED
L4 7 S L3 SSS SAM
L5 142 S L3 SSS FUL

FILE 'CAPLUS' ENTERED AT 17:03:50 ON 06 MAR 2000
L6 10 S L5

FILE 'CAOLD' ENTERED AT 17:05:44 ON 06 MAR 2000

=> s 15

L7 0 L5



```

chain nodes :
  10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 43 44 45 50
ring nodes :
  1 2 3 4 5 6 7 8 9
chain bonds :
  5-50 7-10 10-43 11-17 12-19 13-23 14-18 15-21 16-24 19-20 21-22 23-25 23-26
  24-27 24-28 43-44 44-45
ring bonds :
  1-2 1-6 1-9 2-3 3-4 4-5 5-6 6-7 7-8 8-9
exact/norm bonds :
  1-9 5-50 7-10 8-9 10-43 11-17 12-19 13-23 14-18 15-21 16-24 19-20 21-22 23-25
  23-26 24-27 24-28 43-44
exact bonds :
  6-7 7-8 44-45
normalized bonds :
  1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
  containing 1 :

```

$$G1: [*1-*2], [*3-*4], [*5-*6], [*7-*8], [*9-*10], [*11-*12]$$

Hydrogen count :

3: >= minimum 1

Match level :

```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 43:CLASS
44:CLASS 45:CLASS 50:CLASS

```

Generic attributes :

10:

Saturation : Unsaturated